Examining the Role of Traditional Health Networks in the Karen Self-Determination Movement Along the Thai-Burma Border

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ABSTRACT

The Karen ethnic minority of Burma (also known as Myanmar) has been involved in a prolonged civil conflict with the Burmese military government for nearly six decades. This fighting has resulted in massive internal displacement and refugee flight, and although a ceasefire was signed in 2012, continued violence has been reported. Upon arrival in their host settings, forced migrants struggle with acute health and material needs, as well as issues related to identity, politics, power and place. This study among the displaced Karen population along the Thai-Burma border examines the relationships between traditional – or indigenous – medicine, the population's health needs, and the broader social and political context. Research was conducted using an ethnographic case-study approach among 170 participants along the Thai-Burma border between 2003 and 2011.

Research findings document the rapid evolution and formalisation of the Karen traditional medical system. Findings show how the evolutionary process was influenced by social needs, an existing base medical knowledge among traditional health practitioners, and a dynamic social and political environment. Evidence suggests that that Karen traditional medicine practitioners, under the leadership of the Karen National Union (KNU) Department of Health and Welfare, are serving neglected and culturally-specific health needs among border populations. Moreover, this research also provides evidence that Karen authorities are revitalising their traditional medicine, as part of a larger effort to strengthen their social infrastructure including the Karen self-determination movement. In particular, these Karen authorities are focused on building a sustainable health infrastructure that can serve Karen State in the long term.

From the perspectives of both refugee health and development studies, the revival of Karen traditional medicine within a refugee and IDP setting represents an adaptive response by otherwise medically under-served populations. This case offers a model of healthcare self-sufficiency that breaks with the dependency relationships characteristic of most conventional refugee and IDP health services. And, through the mobilisation of tradition for contemporary needs, it offers a dimension of cultural continuity in a context where discontinuity and loss of culture are hallmarks of the forced migration experience.

I hereby certify that this thesis is the result of my own work except where otherwise indicated and due acknowledgement is given.

Cora Neumann October 8, 2015

DEDICATION

This dissertation is dedicated to those who passed before me, much before their time.

To my grandmother, Johanna Seligmann Neumann, who in April 1933 was banned by the Nazi regime from continuing her doctorate at the University of Frankfurt am Main. She was one of few Jewish females pursuing a doctorate at the time and, heartbroken but undeterred, fled to Bern, Switzerland to finish her Doctorate in History. She instilled in us the value of education, repeatedly stating, 'they can take everything from you, but never your education.'

To my father, Franklin James Neumann, who dedicated his life to his family, and to leaving this earth more whole than he found it. Part of the American 1960s counter-culture, he taught our family to live off the land and, deeply committed to his ideals, brought us into this world to respect and revere the earth.

To my brother, Wyatt Levi Neumann, a brilliant artist, outspoken activist and fiercely committed brother, father and friend. Wyatt was my best friend and witness in this life, and I finished this dissertation amidst acute loss as a commitment to him, and to our children, to carry on our family legacy of letting no obstacles stand between us and what we believe in.

It is my honour to dedicate this dissertation to my grandmother, father and brother. May their fierce fighter spirits, overflowing love of family and idealism live on through me, and through our children, Timea, Levi, Takota and Stella.

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I am very grateful to my research assistant, and to the 170 participants involved in this study. Their tireless commitment to community health and revitalisation is remarkable.

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ABBREVIATIONS AND ACRONYMS

Abbreviations

IDP: internally displaced peoples

Migrant: refers to all categories of forced migrants displaced by Burma's conflict, including IDPs and economic migrants

INGO: international NGO or humanitarian aid organisation

Karen Traditional Health Network: Karen Network

THP: traditional health practitioner

TRM: Traditional Medicine

SDM: self-determination movement

Acronyms

AMI: Aide Medicale Internationale

ARC: American Rescue Committee International

BHM: Burma Humanitarian Mission

BMA: Burma Medical Association

BPHWT: Backpack Health Worker Team

BRC: Burma Relief Center

CARE: Cooperative for Assistance and Relief Everywhere, Inc.

CCSDPT: Committee for Services to Displaced Persons in Thailand

COERR: Catholic Office for Emergency Relief and Refugees

DARE: Drug and Alcohol Recovery and Education Program

FFA: Free-Friendly Asia

GHAP: Global Health Access Program

GIFTS: Global Initiative for Traditional Systems of Health

ICRC: The International Committee of the Red Cross

IOM: International Organization for Migration

IRC: International Rescue Committee

KESAN: Karen Environmental and Social Action Network

KDHW: Karen Department of Health and Welfare

KFD: Karen Forestry Department

MI: Malteser International

MOI: Thai Ministry of the Interior

MSF: Médecins Sans Frontières, France

PI: Partners in Education

SMRU: Shloko Malaria Research Unit

TBBC: Thailand Burmese Border Consortium

UNFPA: United Nations Population Fund

UNHCR: United Nations High Commissioner for Refugees

UNICEF: United Nations Children's Fund

WHO: World Health Organization

ZOA: Dutch-based education & vocational training NGO [ZOA = Dutch for Zuid (South) Oost (East) Azie (Asia)]

Karen Traditional Health Network ("Karen Network") Members

BPHWT: Backpack Health Worker Team

BMA: Burma Medical Association

KDHW: Karen Department of Health and Welfare

KESAN: Karen Environmental and Social Action Network

KFD: Karen Forestry Department

Mae Tao: Mae Tao Health Clinic

CHAPTER I: INTRODUCTION

In 1870, in the midst of the Anglo-Burmese wars, Burmese British authorities appointed a young Scottish doctor to become one of the country's civil surgeons. Dr. Keith Norman MacDonald accepted this post and entered Burma to oversee a hospital, a dispensary and "three hundred convicts" (Lamb, 2012). Over the course of the next decade, this young doctor became enthralled with traditional Burmese medicine – knowledge originating in India and passed down between fathers and sons or masters and apprentices through oral traditions or palm leaf manuscripts. His search for a full palm leaf manuscript was extensive, and after much effort he secured a copy, and spent the remainder of his time in Burma translating and producing a monograph entitled, *The Practice of Medicine Among the Burmese, Translated from Original Manuscripts, With an Historical Sketch of the Progress of Medicine from the Earliest Times* (1879).

This story took place at the advent of British colonialism in Burma, and foreshadows both the opportunity and tragedy that would befall Burmese traditional medicine, and the Burmese people, over the course of the next century. Colonial intervention brought with it interest in local culture and allowed select colonialists like MacDonald to engage with, study and even help preserve a set of valuable ancient traditions. Yet with colonial intervention also came cultural hegemony, and a mandate to dominate medical knowledge and practice, pushing local traditions out of sight and underground. Colonial intervention brought with it novel European medical practices, as MacDonald was charged to bring, including some lifesaving medicines and sanitation practices. Yet colonial medicine was also brought in to bolster colonial militaries as they subjugated local peoples (Blackburn, 2000).

The case outlined in this current study explores the health-related legacy of colonial intervention, the resulting ethnic conflict, and both Western and Burmese medical interventions and practice in twenty-first century Burma. Like MacDonald, I seek to uncover and help document the evolution of a local traditional medicine system – in this case the traditional medical system used by the Karen of Burma. Unlike MacDonald, however, I place this medical practice within the broader and more complex context of post-colonial ethnic conflict, endogenous development, humanitarian intervention, and a burgeoning self-determination movement.

The Research Agenda

The case under investigation in this study focuses on the evolution of a traditional health system available to refugees and migrants along the Thai-Burma border. Specifically, this study describes: (a) the evolution and formalisation of the Karen traditional medical system, including the evolution and formation of the Karen Traditional Health Network ("Karen Network"); (b) the larger social, political and historical context in with the traditional medical system is embedded: (c) how the evolving traditional medical system was affected by the larger social and political system and vise versa; and (d) the role that the evolution of the traditional health system had on serving the needs of displaced Karen ethnic minority population.

More specifically, this thesis addresses the following research questions:

1. How did the Karen traditional medical system evolve into a more formal medical system? Particularly, what was this process like, who was involved and what role did the various individuals and organisations play?

2. How was the evolution of the Karen traditional medical system affected by the larger social, economic and political context in which it existed, and how did it become embedded in larger social and political institutions?
3. How did the more formalised Karen traditional medical system become a resource for addressing health and social service needs among conflict-affected populations (refugees, migrants, IDPs) and what role did it play in relation to existing humanitarian aid services?

To address these research questions, I took an ethnographic, case-study approach. As an ethnographer, I rely on: (a) collecting rich contextual descriptions from a wide variety of participants to gain the insider viewpoint; and (b) using my status as an outsider to better understand how the evolution of the traditional medical system fit into a larger context. The research for this study was conducted between 2003 and 2011. The research approaches included in-depth fieldwork, on-going secondhand ethnography, and interviewing based out of the United Kingdom and the United States. The bulk of this study's primary data was drawn from in-depth, semi-structured interviews with key traditional health practitioner (THP) informants along the Thai-Burma border, participatory research during group meeting with THPs, as well as interviews with key members of each local NGO involved in the study.

To frame the issues relevant to this topic and the situation along the Thai-Burma border, this study draws upon a combination of theories from the fields of development, public health and anthropology. In particular, it draws on the sub-fields of endogenous development and primary healthcare, as well as relying on various concepts of ethnicity within self-determination movements. (These fields and sub-fields are covered in detail in Chapter II.)

In addition to contributing to the fields of development, public health and anthropology, this work will also contribute to prior work done on traditional (indigenous) medicine (TRM). More particularly, it will add to the growing body of research on Karen traditional medicine and how it is being used and practiced by Karen ethnic minority populations affected or displaced by conflict along the Thai-Burma border (Allden et al., 1996; Belton & Maung, 2004; Lopes Cardozo, Talley, Burton, & Crawford, 2004; Bodeker et al., 2005a). To date, no studies have investigated the evolution of the Karen traditional medicine and how it was impacted and been shaped by the larger social and political system in which it is embedded. This dissertation aims to address this gap in the literature.

Below I provide a short overview of the larger context for those readers who are unfamiliar with forced migration, Burma's history and/or the Karen in particular. I also briefly elaborate on the theoretical positions from which I draw. Finally, I end with a summary of the chapters that follow.

Context

Below I provide a brief introduction to the larger context of forced migration and ethnic conflict, as well as a brief history of Burmese conflict and the Karen population. This helps set the stage for the larger and more detailed case study of the Karen traditional medicine.

Forced Migration and Ethnic Conflict

Global causes of forced migration vary, and include push and pull factors such as famine, war, civil conflict, environmental disasters, economic hardship, and human rights abuses. The United Nations High Commissioner for Refugees (UNHCR) reported that by the end of 2012, there were 45.2 million displaced persons across the

globe, an increase of approximately 3 million people since 2011 (UNHCR, 2013). 15.4 million of those individuals were refugees, and approximately 28.8 million were internally displaced persons (IDPs) forced to flee their homes due to war or violent conflict. As of 2013, Burma – the focus of this study – ranked seventh among the "major source countries of refugees" listed by the UNHCR (UNHCR, 2013).

A forced migration setting brings about a complex context within which acute physical and material needs, coupled with populations' desire to maintain and negotiate identity, politics, power and place are perceived by humanitarian aid, development, transnational and globalisation forces and agencies who seek to address these populations' needs. As refugee and forced migration situations like that of Burma become protracted and aid organisations shift focus from emergency responses to development, it becomes critical to examine individual and group agency and roles within the aid-to-development ecosystem.

As is the case in other conflict zones around the world, Burmese refugees and migrants arrive in their host setting with a set of existing resources – both personal and communal. Because the majority of humanitarian and development aid programmes are structured under a Western development and Western medicine (also referred to as "biomedicine") framework, there is a risk that these non-Western refugees are expected to conform to Western constructs, which may further disenfranchise refugee populations.[1] These circumstances have been observed within the Burmese forced migration context, particularly along the Thai-Burma border (Bodeker & Neumann, 2012). The traditional Western approach to humanitarian and development aid has been found to negatively impact personal well-being and agency

1 This type of cultural hegemony echoes colonial interventions and is explored in later chapters.

among migrants, and also to weaken the pre-existing power and organisational structures (such as those established through self-determination movements, henceforth referred to as "SDMs") that exist among these communities (Emmelkamp, Komproe, van Ommeren, & Schagen, 2002; Simich, Beiser, & Mawani, 2003; Hiegel, 1990; Schreiber, 1995; Honwana, 1998).

The Case of Burma and the Karen

The situation within which the current Burmese forced migrant, refugee, and internally displaced persons (IDPs) population finds itself along the Thai-Burma border today remains dire. The end of colonial rule in Burma led almost immediately into civil conflict, and for more than six decades the Burmese military government and various minority groups including the Karen people[2] have been engaged in conflict. This has drawn out into the world's longest civil conflict, causing hundreds of thousands of people to flee their homes within Burma. As of 2013, approximately 415,000 Burmese refugees and migrants sought shelter in Thailand and other neighboring countries – 140,000 of these refugees, predominately Karen, resided in nine camps along the Thai-Burmese border, and approximately 632,000 people were internally displaced within Burma (Naing, 2013, CIA World Factbook, 2014).3 The

2 For the purposes of this study, the Karen people were the Burmese refugee/migrant group of focus. The Karen are the main ethnic minority group residing in the camps in the Thai-Burma border area given that Karen State falls within this region, along a portion of the southeastern area of Burma that borders with Thailand (see map in Chapter V). As of 2014, there were at least 140,000 Karen refugees and migrants living in camps along the Thai-Burma border (CIA World Factbook, 2014).

3 It should be noted that the lines between economic migrants, forced migrants, IDPs, and refugees are in regular flux throughout the Thai-Burma border region. Although "refugees" are counted and registered by the UN High Commissioner on Refugees (UNHCR), services and aid flow freely, and movement – though fairly restricted in the camps – is frequent, making it hard to count and determine the exact status of individuals accessing services in this area. The mere categorization of migrants vs. refugees is a contentious one in many settings, as noted by Voutira (1991): "The available distinctions between 'migrants' as voluntary and 'refugees' denoting simply, involuntary displacement are not by any means clear, clear-cut or adequate. For, by making volition the crucial proviso in the application of these terms, we reduce the interpretation of group phenomena to individual ones, and thus throw away the baby with the bathwater."

Burmese military crackdown was most intense in ethnic minority regions like Karen state, along the Thai border, where populations faced brutal military attacks, and also felt the consequences of a military "Four Cuts" policy that cut them off from all critical health and social services.

Figure 1. Map of Burma and surrounding region.
From "Burma: State of Fear – Additional Resources," by S. Narang, n.d., PBS Frontline World. Copyright WGBH Educational Foundation. Retrieved Sept. 15, 2014 from http://www.pbs.org/frontlineworld/stories/burma601/additional.html#map

It is important to note that although Burma began a transition to democracy in 2011, human rights violations perpetrated by Burmese authorities including torture, rape, and withholding of medical care and social services have continued in recent years (Physicians for Human Rights, 2011, 2012; Footer, Meyer, Sherman, & Rubenstein, 2014). Resurgence of state military attacks on ethnic minority populations as recently as April 2014 have sent thousands more Burmese fleeing into Thailand for refuge (Paluch, 2014). The Karen ethnic minority continued to fight the

military regime until January 2012 when they signed a ceasefire agreement with the new, elected government which, although elected through a national voting process is still dominated by unelected military parliamentary appointees. For decades prior to this most recent ceasefire, the Karen suffered great losses and population displacement, and became a majority population within refugee camps along the Thai-Burma border, making the Karen one of the most impacted, and most visible Burmese ethnic minority groups affected by this prolonged conflict.

Burmese refugees and forced migrants suffer a range of acute and chronic health conditions that have often gone untreated for long periods due to inadequate access to health care within armed conflict zones in Burma. For example, a 2010 report on the Burmese population in conflict zones in eastern Burma found an alarming infant mortality rate of 54 per 1,000 live births and an even higher under-five mortality rate of 71 per 1,000 live births (Diagnosis: Critical health and human rights in eastern Burma, 2010).

Moreover, while Karen refugees and migrants arriving in Thailand between 1988 and 2011 brought with them local, indigenous and ethnic traditions and systems including TRM, these resources were reported by local clinic authorities as going generally unacknowledged by existing humanitarian aid groups, or as not receiving adequate accommodation (Bodeker et al., 2005a). In the specific case of TRM, humanitarian health interventions – based on Western biomedicine theory and practice – have historically regarded traditional health knowledge as generally untested and therefore a risk[4], and/or as social and symbolic constructs rather than clinical health resources.

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4 Although many local practices and beliefs are detrimental and even dangerous (see http://www.unhcr.org/50bc835a6.html), more well developed and researched traditional practices are

The resulting disregard of traditional medicine and its potential health benefits for the local community forms part of a broader Western development paradigm within the refugee camps in the region that fails to consider significant aspects of the Karen population's existing ethnic identities. Furthermore, while acute health care is provided within a Western biomedical paradigm by humanitarian aid organisations in the area, other chronic and local, culturally-specific health conditions such as mental health disorders have been reported as going undiagnosed or untreated among the Burmese refugee populations (Lopes Cardozo et al., 2004).

The continued fighting and oppressive military policies between Burmese military forces and armed ethnic minority "insurgent" groups have led to disastrous economic and health indications for the people of Burma. In 2013, the Burmese government spent a mere 3.15% of its total annual budget on health resources (compared to 19.3% in the United States or 11.3% in Thailand), and reported plans to increase the health budget by less than a percentage point (to 3.38%) in 2014 (Xinhua News, 2014). In its one-time ranking of countries based on overall health system performance, the "World Health Report 2000," the WHO ranked Burma 190th out of the 191 countries surveyed for the report.[5] Once one of the richest countries in Asia, by 2013 Burma ranked 149th out of 187 countries on the UNDP Human Development Index (falling eleven places since 2009). As noted above, the Karen population has been one of the hardest hit in this prolonged conflict and displacement context.

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often grouped by humanitarian aid workers as local or folk medicine and treated as a risk. Preventing these misconception and missed opportunities requires increased awareness and training, and is a main focus of this dissertation.

5 The World Health Report 2000 focused for the first time on overall health system performance in 191 countries. The composite index of health systems' performance used five different measures to analyse "the extent to which health systems produce better health and the extent to which these benefits are distributed equitably" (WHO, 2000).

Despite promising progress in recent years, as of 2013, more than 2.5 million Burmese people remained either internally displaced, stateless, or had fled Burma seeking refugee or asylum status (UNHCR, 2013). Major health issues faced by Burmese refugees and migrants arriving in Thailand include malaria, TB, HIV, malnutrition, reproductive health and psychosocial trauma; they also face issues of shelter, sanitation and vaccination; and legal protection.

During Burma's prolonged internal conflict, ethnicity and ethnic identities have gained increasing importance in minority group authorities' ability to maintain morale and to mobilise shared sentiments, resources and willingness to continue a seemingly endless war. Within its position of forced migration, the Karen population, which had been fleeing political persecution and civil war for over sixty years as of 2011, and its *de facto* ethnic government, the Karen National Union (KNU), have made concerted efforts to maintain and enhance indigenous systems.

In reality, the Karen are a diverse group of peoples made up of numerous sub-populations, with nearly a dozen related languages, and a diversity of animist, Buddhist and Christian belief systems and traditional practices (Minority Rights Group International, 2008). Despite this variation, the KNU has worked to define a common Karen history, language family, ancestry, and set of traditional practices in its attempt to unify and "govern" its people, and to provide needed services in the midst of conflict. This homogenisation process has facilitated the creation of a united front both against the Burmese government (until recent years) and for use in appeals to international audiences.

Theoretical Basis for the Study

The biomedical and Western scientific theories that underpin international development theory and practice, in particular as it relates to humanitarian aid, have gone largely unchallenged by postmodern critiques. The theoretical framework for this study was chosen to address this limitation in the field of development studies. Classic development paradigms have allowed for the critique of historical systems like colonialism, and postmodern and critical development theories have emerged to form alternative perspectives and generate new practices related to development. Yet science and biomedicine theories that underpin classic development and humanitarian aid approaches remain rooted in a rigid binary (North-South, Western-Eastern, global-local, developed-developing) that has gone untouched within this framework. This is seen most clearly within the international humanitarian aid community, which is largely anchored in emergency relief and biomedicine and remains relatively unaffected by postmodern questioning and constructs.

This dynamic was documented in the Karen case, introduced above, wherein local Karen medical practices were ignored by humanitarian aid workers as they delivered "biomedical" care. In contrast, this research approaches its topic through a combined endogenous development and collaborative health care approach. This approach helps acknowledge the potential for practical, collective participation by multiple health systems and authorities during the delivery of care to vulnerable (in this case displaced) populations. The main concepts and theories that frame this study are discussed in detail in Chapter II.

Summary of Chapters

This dissertation is divided into eight chapters in order to present the study in adequate detail. The following chapters outline the information pertaining to and generated by this study. The corresponding seven chapters (excluding the introduction) include the following information:

Chapter II

This chapter presents a comprehensive overview of the literature pertaining to issues of relevance to this study. This includes research on specific health concerns of refugees and forced migrants, as well as literature on primary care and the potential for a collaborative approach to health care. The subjects covered in this review include the use of ethnic resources within self-determination movements, and the Karen authorities' use of ethnicity in particular. The conceptual framework for this dissertation is also provided, explaining the three main concepts around which this study is constructed, including endogenous development, primary health care, and ethnicity as a tool of self-determination.

Chapter III

This chapter outlines the ethnographic methodology, research design and procedures employed in this study, including descriptions of the setting and participants, data collection and analysis procedures, ethical considerations of research, and potential research limitations of this study are considered in this chapter.

Chapter IV

This chapter provides detailed historical background on the Burmese conflict from the colonial period through contemporary times. This includes an exploration of the legacy of colonialism on modern-day Burma and how it has affected the ethnic

divisions that have formed the base of the armed conflict that waged in the country for more than six decades. The chapter also covers the history of medicine in Burma including the interplay between biomedical and traditional systems.

Chapter V

This is the first of three results chapters. This chapter provides an introduction to the Karen traditional medical system. It includes descriptions of: the Karen's medical needs, the western and traditional medical practices available to them; the larger Ayurveda and Burmese medical traditions in which the Karen system fits; Karen traditional medical beliefs and lay knowledge and use of Karen traditional medicine in the border region.

Chapter VI

The second results chapter focuses on the rapid evolution of the Karen traditional medical system, between 2001 and 2011. In it, I describe the phases of the formalisation process, the roles that key individuals and organisations played (members of the Karen Traditional Health Network), the barriers and facilitators to the progress and the symbiotic relationship between the traditional medical system and the larger social and political environment.

Chapter VII

The final results chapter describes how the more formalised traditional medical system affected the delivery of care in the region. It provides a summary of how the supply of traditional health practitioners increased in numbers and distribution, as well as examples of how traditional medicine services were being delivered to the Karen population.

Chapter VIII

This chapter is divided into two sections. The first section addresses each research question separately and summarizes the findings across the different chapters. In the second section, I discuss the implications that the findings have for the literature, future research, and applied practice, and how they might inform other formalisation processes similar those experienced by the Karen.

CHAPTER II: LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

This chapter lays out the framework for the themes addressed in the current study by reviewing the existing scholarship on issues relevant to the use of traditional medicine within a public health and post-development paradigm and self-determination context. To address these issues more clearly, this chapter is divided into four sections. The first section explores the potential contributions of traditional medicine to primary care and refugee health is examined, as well as the possibilities for traditional medicine to contribute to sustainable development systems. The second section addresses the ways in which traditional medicine has been explored in post-development literature and the ways in which the present study aims to contribute to existing scholarship. The third section explores the existing research on the role of ethnic resources within self-determination movements, with a specific focus on the Karen's use of ethnicity for mobilisation and the develop of its own infrastructure. Finally, the last section presents the conceptual framework underpinning this study, including the notions of endogenous development and primary care.

Traditional Medicine as a Tool to Further Refugee Health

This section addresses the unique collaborative health model proposed in the present study as it relates to existing literature. In particular, this section seeks to establish a link between the discourses surrounding primary care, self-determination, and post-development theories with the goal of complicating the existing theoretical models that tend to position global vs. local as opposed to looking at a more complex dynamic. The proposed link between these discourses will inform the possibility of a collaborative approach to development specifically related to health care, which breaks with the existing rigid duality between Western biomedicine and non-Western,

traditional medicine systems. It is posited that traditional medicine may have the potential to be incorporated into sustainable development systems and aid in the establishment of indigenous health service infrastructure, even in the context of internally displaced groups or forced migration. Traditional medicine has the potential to play a pivotal role in primary care, as well as to further individual and group identity, resilience, and psychosocial health. Scholarship from related fields is reviewed in this section to illustrate the connections between primary care, self-determination, and post-development schools of thought.

Particular Concerns Related to the Health of Refugee Groups

It is well documented that refugees suffer from a range of health conditions specific to that population. Burmese refugees arriving in Thailand, in particular, experience high rates of one of the most highly drug-resistant strains of malaria in the world (Nosten et al., 1991; Shanks, Karwacki, & Singharaj, 1990), as well as respiratory infections including tuberculosis, malnutrition, HIV, psychosocial disturbances resulting from violence and displacement, and a range of common and chronic health conditions (Petersen, Lykke, Hougen, & Mannstaedt, 1998; WHO Thailand Border Health Programme, 2004). To exacerbate these already critical health concerns, Burmese refugees also suffer from a lack of access to traditional health services and practitioners – the health care system to which they are accustomed (Bodeker et al., 2005a). While the biomedical emergency approach taken by humanitarian organisations is vital during the initial phase of most refugee migrations, including the case of Burmese refugees' arrival in Thailand, the needs of that refugee population change in the long term.

There is no doubt that the ability of international aid organisations to successfully construct, manage and delegate large-scale nutrition, vaccination and sanitation campaigns saves thousands of refugees' and migrants' lives each year (Cookson et al., 1998). Yet, as many of these situations move into less acute phases, addressing issues of culture, identity and traditional practice becomes imperative in order to facilitate local cooperation and compliance. This situation is even more critical as cases of protracted refugee situations become more and more prevalent, as has been the reality along the Thai-Burma border for several decades. Prior research among refugees from Asia and Africa confirms that lack of access to traditional health services can compound refugee health risks (Hiegel, 1990; Schreiber, 1995; Honwana, 1998). Examining the case of clinical mismanagement of an Ethiopian refugee who was misdiagnosed as psychotic when she actually suffered from cultural bereavement, Schreiber asserts the importance of traditional healers to be incorporated into refugee health care in the role of "cultural bereavement therapists" (1995, p. 135). Hiegel (1990) drew similar conclusions from a study conducted among Cambodian refugees in Thai refugee camps, stating that the need to incorporate traditional healers became apparent through "the presence in the camps of mentally disturbed patients" (p. 4). Hiegel and other camp authorities found it "more appropriate to entrust the care of mentally disturbed refugees to traditional healers" in whom the Khmer refugees already trusted (Hiegel, 1990, p. 4). Addressing a concern that the parents of paediatrics patients were taking them home before their treatment concluded, Hiegel explains how the medical practitioners partnered with local healers who were invited to make regular rounds in the hospital wards with the goal of "provid[ing] psychological comfort and support to patients, many of whom were

unfamiliar or uncomfortable with western health care and its treatments" (1990, p. 5). The role of traditional healers to assist with psychological healing was extended as these local practitioners were asked to make herbal remedies for hospitalised patients with physical ailments who would be unable to obtain refills of their pharmacological prescriptions upon returning to their home (Hiegel, 1990).

Moreover, a number of studies have proven that integrating traditional health practices and practitioners into humanitarian health care can mitigate the dangerous health and socio-cultural consequences of forced migration (Eyber & Ager, 2002; Mollica, Cui, McInnes, & Massagli, 2002; Dhooper, 2003; Eisenbruch, de Jong, & van de Put, 2004; Bodeker et al., 2005a, 2005b). Dr. Richard Mollica, director of Harvard University's Programme in Refugee Trauma, notes the psychological toll that conflict situations can have on victims, emphasising the "enormous mental health impact of human aggression on the health status and daily functioning of affected individuals" (2002, p. 1). Mollica et al. declare that in this type of refugee situation, "indigenous resources need to be maximally utilized in a culturally effective manner to promote healing" (2002, pp. 1-2). Moreover, Dhooper (2003) documents that helping reduce the tension between traditional medical approaches and Western biomedicine for Asian migrants and refugees can help improve patients' overall health regimen. Dhooper specifically recommends that medical practitioners assist "the patient in understanding the medical treatment and the pros and cons of mixing that with his or her traditional approach," noting that an approach like allowing patients to use traditional herbal teas in combination with prescription medication is "likely to enhance the patient's compliance with treatment" (2003, p. 71).

Dhooper's study corroborates the findings of other scholars across Africa and Asia that refugee and migrant populations often seek traditional health services to not only treat pressing health issues, but as a source of cultural continuity and a means of complementing the Western biomedical care offered by most humanitarian agencies (Eisenbruch et al., 2004; Bodeker et al., 2005a, 2005b; Skidmore, 2008; Ganesan, 2010; Patwardhan, Bodeker, & Shankar, 2010).[6] The work of Bodeker and Burford (2005), Bodeker (2007), Ganesan (2010), and Skidmore (2008) is of particular relevance to the context of the Karen community along the Thai-Burma border. In a 2005 treatise on the role of the World Health Organization (WHO) in traditional medicine, Bodeker and Burford note, "Ethnic minorities in industrialized countries often continue to use the traditional medicine from their culture alongside, or even in place of, conventional medicine" (p. 15). Moreover, the researchers note, among many forced migrant and refugee populations from underdeveloped regions, "self-medication with herbal remedies or dietary therapies is the first-line approach to treating common diseases" (Bodeker & Burford, 2005, pp. 16-7), with traditional or Western practitioners consulted only after the in-home remedies have failed (Bodeker & Neumann, 2012). It is thus imperative that biomedical health care providers treating these populations "receive adequate training in the fundamentals of the relevant TCAM [traditional, complimentary, and alternative medicine] modalities as well as in conventional medicine" (Bodeker & Burford, 2005, p. 28). Many modern medical practitioners who are aware of the importance of traditional or indigenous medical systems, Bodeker notes in a 2007 article, are returning to their communities of origin to learn traditional healing methods and incorporate them into their

6 Similar pluralistic health-seeking behaviors are seen throughout the developing world (Weisberg, 1982; Chrisman & Kleinman, 1983; Bentley, 1988; Golomb, 1988; Subedi, 1989; Nichter, 1994; de Zoysa, Bhandari, Akhtari, & Bhan, 1998).

biomedical practice. “Global priority is currently placed on combating malaria and HIV/AIDS, and new partnerships between the communities of traditional medicine, public health and health research are being formed,” Bodeker states (2007, p. 246). Some of these early partnerships have formed along the Thai-Burma border with the organisational leadership of the KNU and other ethnic group leadership. While Bodeker draws attention to this phenomenon, further in-depth examination of this traditional medicine paradigm within a transnational development paradigm is warranted.

Addressing the specific context of post-colonial health care in Burma, Skidmore (2008) traces the Burmese people’s growing reliance on traditional medicine in response to the ineffective and inaccessible health care options in the country over the past few decades. In an effort to respond to the inadequacy of the current medical system in the country, Skidmore explains, “traditional medicine has been and remains a priority area for the previous and current military council and the healthcare system is designed to integrate traditional medicine through all levels of community health care, including education, training, registration, licensing and research” (2008, p. 195). While acknowledging that some village elders continue to pass traditional medicine recipes on to their children, demonstrating that an informal indigenous healing system persists in the country, Skidmore also recognises that “the comprehensive nature of the Ayurvedic system has been largely lost in Burma with the decline of indigenous medical practitioners after British colonization” (2008, p. 197). Moreover, the prevalence of violent conflict and the increasing medical costs are additional factors that contribute to the Burmese people’s limited access to health care in the country (Skidmore, 2008). The efforts of community-based organisations

and global-local partnerships spearheaded by the KNU to meet the medical needs of Burmese along the Thai-Burma border is one example of nongovernmental responses to this prolonged issue.

Other scholars have posited that traditional health resources may also support community building, civil society, identity, and coping mechanisms among refugee populations in the face of rapid change and upheaval (Eisenbruch et al., 2004; Lopes Cardozo et al., 2004; Lustig et al., 2004; Neuner et al., 2004). Eisenbruch and colleagues found that, through organised refugee self-help groups structured around local cultural norms, "women and men, even some of the most deeply alienated… could sit together on a mat in the village, for example, and acknowledge their shared anguish and suffering" (2004, p. 128). This type of collective healing, the researchers found, is facilitated by "a combination of local resources such as traditional healers, health care, and relief workers," which has the potential of "ameliorat[ing] psychosocial problems of large groups" (Eisenbruch et al., 2004, p. 128). This collective approach to healing strengthens social bonds within forced communities that have often been established through external processes like the formation of refugee camps. Indeed, kinship, cultural and community ties supported through traditional and psychosocial health channels are documented as aiding refugees and migrants in overcoming the traumas of conflict and migration, and in some cases are reported as being equally or more highly valued by refugees than humanitarian or refugee aid (Williams & Westermeyer, 1983; Van et al., 1987; Mountcastle, 1997; Emmelkamp et al., 2002; Simich et al., 2003). In fact, TRM health resources have proved critical in helping individuals in a forced migration context overcome the trauma and health conditions associated with conflict and migration (Buchwald,

Panwala, & Hooton, 1992; Capps, 1999; Hinton, Hinton, Pham, Chau, & Tram, 2003).

While the current literature on traditional medicine and refugees reviewed above documents the use of traditional practices – particular relating to psychosocial health – by refugees and forced migrants, and a selected few investigate integrative health interventions, none of these studies have investigated traditional health initiatives and how these might fit into formal humanitarian aid structures. As such, the current study strives to further inform existing research on the potential for establishing formal collaborative health care programmes that incorporate traditional medicine, not just psychosocial support, into international humanitarian efforts.

An Integrated, Collaborative Approach to Primary Care

It has been well documented that an overwhelming majority of populations in developing countries rely on traditional medicine for their primary health care (Bodeker et al., 2005b; Bodeker & Burford, 2005). Given that the majority of the world's refugees and migrants stem from the developing world, traditional health knowledge and practices play an important role in refugees' understanding of health, and may serve as a resource for sustainable health service delivery, as well as a culturally appropriate complement to Western humanitarian care. Considering these circumstances, an integrated approach to primary care presents the possibility to impact populations affected by displacement in a more comprehensive manner by incorporating both biomedical and traditional systems into the care delivered to patients.

The seminal Declaration of Alma-Ata, released by the World Health Organization during the 1978 International Conference on Primary Health Care,

defined primary health care as "essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and country can afford to maintain at every stage of their development in the spirit of self reliance and self-determination" (Declaration of Alma-Ata, 1978). It can be argued, although it is not explicitly stated in the Declaration, that "practical, scientifically sound and socially acceptable methods and technology" can include both local and global health systems such as Ayurveda and Chinese medical systems. Primary healthcare was originally defined as a system that includes disease prevention; health promotion; support of agriculture, education, and nutrition systems; and relies in part on "traditional practitioners… [who are] suitably trained socially and technically to work as a health team" (Declaration of Alma-Ata, 1978). In the last three decades since the release of the Declaration of Alma-Ata, efforts to integrate national systems and local voices and traditions have waxed and waned. Nevertheless, there is a growing awareness among researchers and aid workers alike that traditional medicine is socially, economically and often geographically more available to the majority of poor and rural populations.[7] The next challenge is to move from awareness to practice.

Although international organisations have been slow to incorporate critical components of traditional medicine into their initiatives, in the last two decades, they have begun to make recommendations to increase focus on local resources such as traditional health practitioners and practices (Medecins Sans Frontieres, 1997; Sphere,

7 In Ghana, for example, only about 35% of the total population had access to allopathic health services in 2007. The remaining 65% of Ghanaians relied on forms of traditional and alternative medicine for their health care, which are inadequately regulated and therefore pose certain dangers to the public relying on them (Ghana Ministry of Health, 2007).

2011). The Sphere Project, an alliance of top international relief organisations, produces the "Humanitarian Charter and Minimum Standards in Disaster Response" for use by health workers worldwide. The 2011 guide notes, "Disaster-affected people possess and acquire skills, knowledge and capacities to cope with, respond to and recover from disasters. Active participation in humanitarian response is an essential foundation of people's right to life with dignity affirmed in Principles 6 and 7 of the Code of Conduct for the International Red Cross and Red Crescent Movement and Non-Governmental Organisations (NGOs) in Disaster Relief" (Sphere, 2011).[8] Community involvement and a "people-centered" approach to disaster relief and humanitarian aid is emphasised more than ever in the Sphere Project's latest guide. They explain its importance to those affected by disaster, "Self-help and community-led initiatives contribute to psychological and social well-being through restoring dignity and a degree of control to disaster-affected populations." Moreover, the guide recognises, "Access to social, financial, cultural and emotional support through extended family, religious networks and rituals, friends, schools and community activities helps to re-establish individual and community self-respect and identity, decrease vulnerability and enhance resilience" (Sphere, 2011). This core standard demonstrates an awareness of the importance of involving the community in order to protect and strengthen the health and resilience of the people affected by disaster, forced migration or displacement. As such, the guide recommends, "Local people should be supported to identify and, if appropriate, reactivate or establish supportive networks and self-help groups" (Sphere, 2011).

8 From section titled, "Core Standard 1: People-centered humanitarian response."

Medecins Sans Frontieres (MSF) provides specific guidelines for aid workers in refugee health, although they have not been updated since 1997. Nevertheless, the MSF guide warns aid workers, "ignorance of (cultural and religious beliefs) may have major consequences on whether or not the different services provided are accessible at all" (1997, p. 24), suggesting that outside organisations and workers must be sensitive to cultural and religious norms in order to ensure that the local community will actually take advantage of the services they are trying to provide. MSF then recommends adapting a "general model of intervention to traditional beliefs, customs and social settings," which they note, "requires a certain level of input from the refugee population" (p. 289). The organisation thus suggests that relief workers engage quite in-depth with local leaders and customs in order to establish aid programmes that are as effective as possible. In particular, MSF notes, "the customary ways of coping should be identified, including the availability of traditional healers, the religious and social support network, [and] mourning rituals" (p. 289).

Unfortunately, there is little evidence that the recommendations of groups like the Sphere Project and MSF are being enacted.[9] A 2012 report by Christian Aid addressing how to improve humanitarian aid in the future recognises the fact that local capacity building and involvement of the affected community is often not a priority for international humanitarian organisations. The report cites independent evaluations of humanitarian aid delivery after the 2004 tsunami in the Indian Ocean, including that of Parakrama (2007) that noted, "The way in which the humanitarian sector is funded, by sudden inputs following public appeals, encourages an emphasis

9 This supposition is based on my own prior work in the field of refugee health, and is echoed in a number of humanitarian critiques highlighting the lack of local capacity building in humanitarian interventions and refugee camp settings (e.g., Walkup, 1991; Castles, 2002; Harrell Bond, 2002).

on rapid service delivery, exaggeration of the agencies' own importance and understatement of the role of local people" (as cited in Nightingale, 2012, p. 2). Others involved in international disaster relief also acknowledge this weakness in contemporary humanitarian aid. "The international humanitarian community needs a fundamental reorientation from supplying aid to supporting and facilitating communities' own relief and recovery priorities," Telford, Cosgrave, and Houghton stated (2007, p. 22). Telford et al. added, "This change will only be possible if the affected population 'owns' the relief response and aid agencies hold themselves accountable to affected people" (Telford et al., 2007, p. 22). One way to do this is to tap into already existing systems and networks, like those afforded by traditional medicine, in order to actively involve the local people as well as the local cultures and traditions. The Humanitarian Emergency Response Review (2011) had a similar perspective. "The paradigm is still viewing the affected population too much as what economist Julian Le Grand has called 'pawns' (passive individuals) and the international community as 'knights' (extreme altruists). This approach costs. Local capacities are not utilised, the beneficiary is not involved enough and the quality of delivery is lower than it should be" (p. 26). Rethinking existing approaches to international relief efforts is thus imperative in order to improve the current and future circumstances of refugees and other affected populations. Humanitarian and refugee aid agencies set the global agenda for refugees, and determine the fate of refugees' health and well-being (Hansch & Burkholder, 1996). In disregarding traditional health systems, these agencies may be overlooking a valuable sustainable resource, as well as contributing unknowingly to a loss of refugee identity and important cultural health knowledge.

Traditional Medicine in Postdevelopment Literature

A final and important factor that must be considered in relation to the current study is how traditional medicine fits into a development paradigm. Historically, development has privileged a Western perspective that saw "first world" developed countries as the saviours of "third world" developing countries who could not stay afloat without external aid. This tendency in development discourse dominated global policy throughout the majority of the twentieth century. From dependency theories in the 1970s that relied on a basic needs approach and Neo-Malthusian theories concerned with controlling economic and population growth, to Neo-liberal policies in the 1980s that focused on the open market and limited economic control, international aid organisations continued to dominate development approaches in developing countries, especially in emergency and disaster situations (Willis, 2011). Certain early proponents of grassroots and sustainable development approaches emerged in the 1980s, calling for mobilisation from below and emphasising initiatives that balance current needs with future concerns of a given community. The post-development movement in the 1990s not only challenged traditional notions of development, but also proposed new, alternative development paradigms that privilege the involvement of local communities and cultures. The current study fits within a post-development paradigm that relies on alternative development frames, including the integration of local and global actors to enhance a community's self-reliance and self-determination. A brief review of the literature on post-development and alternative approaches like endogenous development is included in this section, as well as a consideration of where traditional medicine fits into this literature.

The Postdevelopment Movement and an Endogenous Development Frame

The post-development perspective sees the main flaw in development as the discourse surrounding it. Knutsson explains, from "the more critical post-development perspective… People's worldviews, knowledge, mindsets and assumptions towards development – which supposedly equalled infinite progress – were considered completely uncritical and 'religious' in character" (2009, p. 25). Indeed, proponents of post-development criticise traditional development for reinforcing colonial hierarchies that re-create unequal power dynamics between countries delivering aid and those receiving it. As Batterbury and Fernando explain, primary post-development critic Arturo Escobar considered that "Western 'development', particularly during the Cold War, lies behind the construction of almost all aspects of social reality in the Third World, in such a pervasive way 'that even its opponents were obliged to phrase their critiques in development terms'" (2004, p. 114). In a 2012 interview, Escobar shared his perspective on how development is simultaneously an ideological export and an act of cultural imperialism. "Perhaps no other idea has been so insidious, no other idea gone so unchallenged" as development, Escobar remarked (Reid-Henry, 2012, para. 4). "Told how to behave, poor people were made subjects of development as much as they were subjects of their own government" (Reid-Henry, 2012, para. 6).[10] Moreover, Knutsson explains that the Western world's "self-imposed right to intervene and rule" these

10 According to Escobar, post-development makes three main contributions to aid and refugee situations. First, it affords "a critical stance on established scientific discourse and … a rejection of the ethnocentric, patriarchal, and ecocidal character of development models" (Escobar, 1991, p. 675). Second, he states that post-development theory offers "a defense of pluralistic grassroots movements, in the belief that these movements, and 'new social movements' in general may be providing a new basis for transforming the structures and discourses of the modern developmentalist states in the Third World" (p. 675). Lastly, Escobar asserts, this approach conveys "a conviction that we must work toward a relation between truth and reality different from that which has characterized Western modernity in general and development in particular" (p. 675).

developing countries "implies destruction of indigenous culture, environmentally sustainable modes of production and diverse ways of living" (2009, p. 26). Escobar and other post-development thinkers consequently argued that for anything to change, it needed to happen from outside that modern development discourse.

Alternative development approaches emerging out of the post-development movement include beyond development, anti-development, another development, human development, ethnodevelopment, and endogenous development, among others. Hettne, for example, a proponent of another development, saw alternative development paradigms as following three main principles: 1) "The principle of territorialism as a counterpoint to functionalism;" 2) "The principle of cultural pluralism as a counterpoint to standardized modernization;" and 3) "The principle of ecological sustainability as a counterpoint to 'growth' and consumerism" (1995, p. 199). For Nederveen Pieterse, an alternative development approach is along similar lines, "redefining development as a collective learning experience. This includes learning about different understandings of improvement" (Nederveen Pieterse, 2001, pp. 158-159). Such an approach necessitates a consideration of the unique cultural perspective of populations being served and incorporating their worldview into new development programmes. These principles are embodied in varying manners by most post-development schools, including endogenous development.

Vázquez-Barquero (2011) defines endogenous development as an approach that "considers development as a territorial process (not a functional process) that is methodologically based on case studies (not on cross-section analysis) and that considers development policies are more efficient when carried out by local actors (not by the central administrations)" (p. 25). By recognising that long-term change

and sustained public resources and services rest in the capacity of the local community to sustain them, endogenous development believes that "'bottom-up' development strategies… allow mobilised and channeled resources and development potential within the territory" (Vazquez-Barquero, 2011, p. 26). According to Vazquez-Barquero, an example of the potential of endogenous development is the revival of local cooperatives and associations in the Sierra de los Cuchumatanes, Guatemala during the 1990s. "These organizations also resuscitated the experience and knowledge of self-management that existed within the local population, but was lost during the civil war. Moreover, more informally structured organizations, or interest groups, were encouraged, which brought together people with common productive and commercial interests" (p. 30). While local networks and traditional knowledge bases need to be the foundation for endogenous development to work, there are "also new opportunities for local action through coalitions with global actors" (Scott & Garofoli, 2011, p. 333). Traditional medicine is one area where local-global cooperation could benefit the larger community by potentially enhancing primary health care and extending its reach to larger portions of the population.

Endogenous Development and Traditional Medicine: A Promising Combination

While post-development and endogenous development approaches are a step in the right direction, this literature and discourse almost always represents traditional medicine as social, highly localised systems rather than recognising them as global systems based in established medical or scientific theories and practices. This is an unfortunate oversight that reflects the inability of alternative development paradigms to completely escape from a Eurocentric, dualist worldview that sees Western biomedicine as the only legitimate "global" medical system and traditional medicine

as an opposing, localised and therefore less powerful system. There is a marked scarcity in development-related literature that approaches traditional medicine systems as global rather than local. The work of Gerard Bodeker represents a productive handling of this topic from within the post-development field. Bodeker clearly describes the limitations in Western science to consider or appreciate the potential contributions of other medical systems, while also engaging both local and "global" systems like Chinese and Ayurveda medicine in the debate. Paul Sillitoe, editor of the book *Local Science Vs. Global Science: Approaches to Indigenous Knowledge in International Development* (2007), also assumes this perspective. Sillitoe explains, "There is a growing realization that the diversity of knowledge systems demand respect, some refer to them in a conservation idiom as alternative information banks. The scientific perspective is only one. We now have many examples of the soundness of local science and practices… arguing for the incorporation of others' knowledge in development" (2007, p. 4). The ability to be critical of the scientific, biomedical perspective is an approach that is glaringly absent from postmodern critique, which has taken issue with many other previously unchallenged perspectives and paradigms that dominated modernity. This critical approach to how Western biomedicine and science are treated within the field of development is an important step in recognising the value and significance of other perspectives, including traditional medical systems.

In his research, Bodeker (2007) notes that although the WHO and other organisations have called for traditional, complimentary, and alternative medicine (TCAM) to play a larger role in public health, its incorporation has not been on an equal playing field. Instead, he states, traditional medicine has been required to

submit to Western empirical investigation and studies, which is problematic in that it continues to privilege a Western empirical worldview while simultaneously reducing traditional constructs to "testable elements in a Western framework" (Bodeker, 2007, p. 24). Recognising traditional knowledge systems and understanding their unique cosmologies is thus an important step in a more equal complementary relationship between Western biomedicine and traditional medicine as part of a larger primary care system. Bodeker stresses the fact that traditional health systems are "based in cosmologies that take into account mental, social, spiritual, physical and ecological dimensions of health and well-being" – cosmologies that must be considered and respected by biomedical practitioners seeking to establish more integrated frameworks (2007, p. 24). Drawing on the Indian Vedic tradition as an example, Bodeker explains that within this cosmology, the role of the observer is of central importance to an individual's health and well-being since consciousness is the "basis of all material existence" (2007, p. 25). Bodeker concludes that "open-minded and respectful dialogue between modern medical scientists and the custodians of traditional medical knowledge" is central to any system that seeks to integrate that knowledge with a scientific framework (2007, p. 34). Bodeker's approach validates traditional medicine as belonging to scientific rather than purely social systems, in contrast to the vast majority of existing post-development literature.

This study proposes a similar perspective as Bodeker, expanding his model from the field of medicine to encompass the field of development. To further describe this model and its related assumptions, following is an overview of the conceptual and theoretical underpinnings that shape the analytical frame of this study.

Ethnic Resources within Self-Determination Movements

In this section, I examine literature that addresses ethnicity as it relates to the Karen in Burma, as well as its use as an ethnic tool for self-determination. Ethnicity has historically been understood as a set of primordial characteristics and kinship ties, as defined in the *Dictionary of Social Sciences*: "An ethnic group (or ethnicity) is a group of people whose members identify with each other, through a common heritage, consisting of a common language, a common culture (often including a shared religion) and a tradition of common ancestry" (Calhoun, 2002). Although I recognise the primordial roots of Burmese ethnic definition, this dissertation draws on a constructivist notion of ethnicity as defined by Barth (1969) and Eriksen (2010), which posits that ethnicity – like any social identity – is constructed by a specific group in order to emphasise commonalities, and is often used to highlight a group's differences from other collectives with whom they have contact. Used in this way, ethnicity can function as a tool for SDM movements within a context of forced migration or displacement, as is the case in Burma (South, 2007b).

The Karen of Burma: Reimagining Ethnicity

The current study looks specifically at the Karen ethnic minority group of eastern Burma. The Karen is one of the country's largest ethnic minority groups, comprising an estimated 10% of the total population and numbering between 6-7 million people (Burma Project, 2006).[11] Many of Burma's ethnic minorities stem

11 This is the most recent reliable data on the Karen group as it relates to Burma. The Minority Rights Group International did reference the following findings: "US State Department estimate for 2007 suggests there may be over 3.2 million living in the eastern border region of the country, especially in Karen State, Tenasserim Division, eastern Pegu Division, Mon State and the Irrawaddy Division" (2008, p. 2). This estimate points to the large concentration of Karen along the Thai-Burma border as a result of forced migration and internal displacement within Burma.

from China's Yunnan Province, but the origin of the Karen people remains unclear (Marshall, 1922; Kunstadter, 1967; Anderson, 1993). It is speculated by some that the Karen originated in southern Tibet (Lewis & Lewis, 1984). Indeed, the Karen languages, which include the Sgaw, Pwo, and Pa'o branches, belong to the Tibeto-Burman group of the Sino-Tibetan language family. The Karen are documented as having first entered Burma during the thirteenth century (Rashid & Walker, 1975). Today, they inhabit Karen state, as well as parts of the Karenni and Shan states in eastern Burma, within the Irawaddy Division. Over the past few centuries the Karen have also settled into northwestern Thailand, with increased settlement along the Thai border in recent decades due to forced migration resulting from the Burmese internal conflict.

The Karen traditionally live in village structures throughout low foothill elevations and are mainly agrarian, using terraced farmland to cultivate rice and maize. Animism has historically been the dominant spiritual practice in the Karen community. While these practices continue today, the majority of Karen people have converted to Buddhism or Christianity. Much of the criticism against the Karen self-determination movement stems from the perspective that the Karen Christian majority is oppressing Buddhist and other Karen minorities for political and other gains along the border (this issue is discussed in more detail below). Throughout Burma, and among the Karen, Christianity and Buddhism coexist with indigenous deities and spirits such as Nats and ghosts (detailed later), as well as with traditional medical beliefs and practices. This religious syncretism thus incorporates traditional indigenous medical knowledge systems. The traditional health practices used by the Karen are based in animism, Buddhist and Ayurvedic medicine of India, as well as

local indigenous and family traditions (Spiro, 1967; MacDonald, 1879; Neumann, 2003a, 2003b; Neumann & Bodeker, 2007; Tun, 2003).

The Karen is the largest and most organised ethnic group to have actively fought the Burmese military junta for six decades straight, and the group only recently signed a preliminary ceasefire agreement with the government in 2012, which has yet to yield many concrete developments. The majority of refugees currently sheltered in Thai-based camps are Karen, and the KNU uses cross-border trade and international support to manage an extensive social welfare administration and defense force. Ethnic definition has been a necessary component in furthering the Karen fight for self-determination, and groups like the Karen have needed to strengthen ethnic definitions to build cohesion and consolidate "membership" among its population. Karen is the largest ethnic group in Asia without their own homeland, a reality that for decades served as an important impetus for KNU's independence movement. The KNU did drop its demand for an independent state in 1984 as the result of a major policy shift (South, 2011), but it has only recently reached a tentative ceasefire agreement. For decades, the KNU's mission has been based on the following four principles, which reflect the vision of fallen Karen leader Saw B U Gyi: (1) Surrender is out of the question; (2) The recognition of the Karen State must be completed; (3) We shall retain our arms; and (4) We shall decide our own destiny (Karen National Union, n.d.).

Among the four objectives listed on the KNU website are: "To gain the rights of equality and self-determination for the Karen people," and "To establish the Karen state with a just and fair territory and self- determination" (KNU, n.d.). The KNU ideology therefore continues to revolve around the concept of a homogenous Karen

nation and the ultimate objective of achieving a semi-autonomous Karen state through a Federal Union system in Burma.

The KNU's construction of its own history to further its political aims is clear upon reading the organisation's official website. On it, they claim that the Karen have a "rich culture spanning thousands of years… our own history, languages, and culture," listing the organisation's (KNU) own origins as dating back to 1881 (KNU, n.d.). In reality, the KNU was not formed until 1947 (South, 2007b), with most subversive or radical acts prior to that date lacking widespread organisation and mobilisation. The KNU's strategic presentation of Karen history in the line quoted above is thus reflective of its reconstruction and manipulation of history to represent the Karen people as a historically unified, organised community. According to South (2007a), the Karen are an "'imagined community" based on "deep-rooted cultural cores (or ethnie), composed of both modern and traditional elements" (p. 2). Moreover, Gravers (1996) writes, the KNU is "making ethno-history and creating its own anthropological model as an authentic one" (as cited in South, 2007b). This partially imagined culture, and the fight to preserve it, functions as a rallying cry to all Karen, reiterated through the KNU assertion on its official website that the "Burmese dictatorship is systematically trying to destroy Karen culture" (KNU, n.d.).[12]

Beyond the KNU website, there exists a strong mandate present across all policies of the Karen government-in-exile to mitigate the Burmese dictatorship's efforts to systematically destroy Karen culture. Indeed, in spite of the broad diversity in their actual population, Karen culture and the Karen people are presented as one and the same throughout much official KNU literature. However, as mentioned

12 KNU leadership have not removed this statement from their website (accessed January 2014) despite having signed a cease-fire agreement with the government in early 2012.

previously, the Karen are a family of peoples made up of numerous sub-populations, speaking nearly a dozen related languages, with a diversity of animist, Buddhist and Christian belief systems and traditional practices (Minority Rights Group International, 2008). Despite this variation, the KNU has worked to define a common Karen history, language family, ancestry, and set of traditional practices including traditional medicine (positioned as such – an "ethnic resource" – for the first time in this study) in their attempt to unify and govern their people, and to provide needed services in the midst of conflict. This homogenisation process has facilitated the creation of a united front both against the Burmese junta and for use in the organisation's appeals to international audiences. Perhaps most importantly, these moves keep the population motivated to continue supporting the world's longest internal war.

Ethnicity as a Tool for Population and Resource Mobilisation

The function of ethnicity as a tool for social and political mobilisation of groups around a shared goal has been documented by many scholars in a wide range of communities across the globe. This section reviews some of the more salient and relevant findings of that scholarship as it applies to the specific case of the Karen in Burma. There are two main trends in scholarly attempts at defining ethnicity. Proponents of primordialism (also known as "instrumentalism") see ethnicity as a set of cultural traits and traditions shared by a group (Stewart, 2003; Turton, 1997; Banks, 1996), while proponents of a constructivist definition view ethnicity as a construct by which people differentiate themselves from one another (Barth, 1969; Eriksen, 2010; Moerman, 1965; Friedman, 1990). Current approaches tend to agree on constructivist concepts, as noted in Eriksen's (2010) seminal work on ethnicity,

"ethnicity is an aspect of social relationship between agents who consider themselves as being culturally distinctive from members of other groups with whom they have a minimum of regular interaction. It can thus also be defined as a social identity" (p. 12). Understanding ethnicity along these lines, it becomes clear that this concept often functions as a unifying ideology around which certain communities rally in order to strengthen their mobilisation movements *against* other groups.

Indeed, the concept of ethnicity has developed along constructivist lines over the past five decades, emerging as a modern critical political, social and anthropological concept used to frame and analyse increases in civil, inter-group conflict, as well as the emergence of global Diaspora communities. As Eriksen (2010) notes, "ethnic organisation and identity, rather than being 'primordial' phenomena radically opposed to modernity and the modern state, are frequently reactions to processes of modernisation" (p. 9). As studies by Chatty and Finlayson (2010), Eriksen (2010), and Moerman (1965) – among others – reveal, much organising of indigenous communities in the twentieth and twenty-first centuries in different parts of the world has been the result of mobilisation around notions of ethnic identification. Moreover, Chatty and Finlayson (2010) note, "ethnic identities tend to become most important in situations of flux, when there are sudden or profound changes underfoot, when resources or boundaries are being threatened" (p. 22). The prolonged internal conflict in Burma thus fits into this context, especially for ethnic minority groups like the Karen who feel that their autonomy is directly threatened by the Burmese government. Ethnicity consequently becomes a strategic tool for, and reaction to, group needs to maintain unity or establish separate identities – depending on the context.

In many cases, ethnicity is much more difficult to define than one might think, and the attributes used by one group as part of their ethnic identification may overlap with the qualities of other, seemingly separate ethnic groups. Moerman's 1965 study of the Lue in Southeast Asia illustrates this challenge. Although the Lue shared a similar language, dress and customs with their neighbors, they still considered themselves to be distinct, although they could not clearly describe identifying characteristics when asked to do so. As such, Moerman (1965) concluded, "someone is Lue by virtue of believing and calling himself Lue and of acting in ways that validate his Lueness" (as cited in Eriksen, 2010, p. 12). Ethnicity's clearly subjective nature thus informs its usage by ethnic leaders who are able to mold a definition of ethnicity to fit the specific group of individuals that they are attempting to unite.

Gubler and Selway (2012) identify three main ways in which ethnicity facilitates mobilisation of a specific group's grievances within a civil war or intra-group conflict situation. These include: 1) identification with nationalist goals; 2) facilitation of social control; 3) enhanced in-group communication (p. 209). All three trends can be applied to the case of the Karen population along the Thai-Burma border. While the KNU has now abandoned its call for complete independence, it still rallies the Karen people around the notion of a semi-autonomous Karen state. Gubler and Selway (2012) explain that, as an "ascriptive identity" – or a form of identity to which certain identifiable attributes (like skin color, kinship ties, or language) are ascribed – ethnicity "decreases the costs of group mobilisation by providing an easier means with which to identify with nationalist goals" (p. 209). The power of ethnicity upon which ethnic group leaders draw in nationalising efforts, according to Turton, "depends upon its being seen as 'primordial' by those who make claims in its name"

(1997, p. 82). Part of this nationalising process, Stewart (2003) adds, entails "the use of ethnic symbols and the enhancement of ethnic identities, often by reworking historical memories" (p. 4). Drawing on collective histories, and at times partially reconstructing these histories to elicit the nostalgia of community members, "is a particularly powerful mechanism by which leaders gain support and mobilise people for self determination struggles" (Stewart, 2003, p. 4).

Once united as a seemingly homogenous ethnic nation or group, the other means of social control and in-group communication are facilitated with more ease. Humphreys and Weinstein (2008) explain that the dense ethnic networks afford group leaders the power of social pressures within tight-knit communities to "change how individuals evaluate the costs and benefits of joining [the] movement" (as cited in Gubler & Selway, 2012, p. 210). The logic behind ethnic in-group communication is relatively straightforward. As the authors explain, "members of these networks share not only a common language, which greatly facilitates communication… but also a common set of norms and expectations (culture) that facilitate understanding when communication takes place" (p. 210). One potentially problematic assertion here is the assumption that ethnic groups share a common language, when often there are multiple dialects within a larger ethnic group that may actually contribute to *mis*communication. However, common cultural norms and values do contribute to enhanced communication that furthers the mobilisation of ethnic groups. One specific circumstance within which ethnic mobilisation has proved useful is in situations of forced migration, as can be seen with the Karen people in Burma.

Due to the fact that this study focuses specifically on ethnic conflict and migration in the context of the Thai-Burma border, I will narrow my analysis of

ethnicity's use as a tool of mobilisation to focus on forced migrant groups and the dynamics that surround these communities. Among these forced migration populations, Eriksen (2010) notes that ethnicity can be used as a mobilising resource, or as social or political capital, with the potential of producing viable economic opportunities. For example, when faced with scarce resources, in combination with a very competitive job market, Hausa migrants in Nigeria drew on ethnic bonds to organise and quickly professionalise the cattle trade in their city (Eriksen, 2010). Before long, the Hausa had monopolised cattle trading in the area, using ethnic ties to formalise and benefit from a trade with which they were relatively unfamiliar. In competitive settings like a job market or local economy, "ethnic networks are activated" and ethnic associations are created and strengthened (Eriksen, 2010, p. 42).

The potential for ethnicity to strengthen group ties can be seen in the case of the Karen in Burma. The use of ethnicity as a tool for mobilisation in Burma is apparent at two levels. At the macro level, different ethnic groups project a unique ethnic image for their particular community, "emphasis[ing] and exploit[ing] identity differences in order to promote political and/or economic objectives" and strengthen their cause (Stewart, 2003, p. 4). At the micro level, the shared qualities within the specific ethnic group are emphasised and reinforced over any potential areas of division among members of that community (Eriksen, 2010). Davies (2001) recognises that part of this push to homogenise Karen culture in the face of conflict is likely to have stemmed – at least initially – from the people's tendency to "cling to collective identity, nationality, citizenship, family, community, in order to belong, to reduce fear" (as cited in Brees, 2009, p. 611). Ethnic group leaders potentially drew upon this tendency to further emphasise this homogenous understanding of Karen

culture and tradition. As is to be expected, the Burma conflict has reinforced and further entrenched deepening ethnic division between different minority groups, with the primary goal of these groups, and the Karen in particular, being independence. This struggle for independence has since shifted to a call for "a new federalism in which [ethnic] states… have fairly elected governors and meaningful revenue sources so they can run many of their own affairs," according to Dapice and Vallely (2013). This shift in the demands of the KNU and other Burmese ethnic groups suggests promising progress in the country's tentative process of transition to democracy.

The pivotal role played by ethnicity in the mobilisation of Burmese ethnic groups is not undermined by this recent shift in agenda, however. As Chatty and Finlayson note, "ethnicity is often linked to political processes of boundary drawing between dominant groups and minorities," and by calling for a federalist state, the KNU aims to retain much of its autonomy in exchange for critical economic support (Chatty & Finlayson, 2010, p. 27). As such, ethnicity must be maintained and strengthened to continue the fight for semi-autonomous states in Burma and elsewhere. Eriksen (2010) asserts that ethnic "social identity becomes most important the moment it seems threatened" (p. 68). This crucial moment of political transition in Burma is one such example.

Literature on Karen Use of Ethnicity

There are extensive studies on ethnic groups' use of ethnicity, social capital and group membership to mobilise and support the ongoing conflict along the Thai-Burma border. Most of these assessments come from the fields of anthropology, sociology and political science, and the majority examines the use of language, education and broader themes of Karen "culture" in Karen authorities' efforts to

empower their leaders and create and present a united cause. These studies tend to be broken down into two main camps. The first camp of scholarship sees Karen leadership (primarily the KNU) as exploiting ethnicity for its own ends. Scholars in the second camp, in contrast, applaud the self-rule and well-orchestrated hierarchy and ethnic mobilisation efforts that are serving the (primarily) Karen border population. Major themes from each camp are reviewed below, as well as the work of several other scholars that falls outside both camps, with the goal of situating the current study within existing scholarly trends.

The first camp of scholars focuses on the Karen authorities' attempt to homogenise and dominate diverse border populations. Researchers associated with this perspective include Jessica Harriden (2002), Sandra Dudley (2003), Su-Ann Oh and Marc van der Stouwe (2008), and Ashley South (2007a, 2007b, 2011). Much of this literature sees the KNU project as reimagining ethnic definitions to strengthen military efforts and recruit new members, as well as to achieve political gains along the Thai-Burma border. Moreover, the emphasis on Christianity as the sole religion for the Karen community is seen as oppressive and marginalising to the large Karen Buddhist faction, as well as other Karen minorities. Many of these authors also critique the KNU's use of a perceived Karen ethnic unity to manipulate and control humanitarian aid and other forms of external resources and support.

Examining the history of Karen nationalism, Harriden (2002) posits that, as part of its mobilisation efforts, the KNU promoted a homogenous, pan-Karen identity which minimised the diversity across different religious, linguistic, and cultural sub-groups that had historically been encompassed under a broad definition of Karen ethnicity. This attempted homogenisation resulted in the emergence of factionalism

between different groups of Karen, hindering the broader political efforts of the KNU. Harriden (2002) explains how this intra-ethnic conflict among the Karen led to the disillusionment of many Karen towards the KNU's inability to consider or acknowledge their interests, further complicating inter-ethnic conflict that already existed between Karen and non-Karen.

Dudley's (2003) work elaborates on Harriden's exploration of inter- and intra-ethnic conflict among ethnic minority groups by examining the myriad of internal and external influences on refugee groups along the Thai-Burma border. By examining the different resources used by internal ethnic leaders and external NGOs and activists to further their cause, Dudley documents the pivotal role played by the internet and other communication networks in this exchange. The researcher notes the "relational aspects of a people's construction of their group identity," explaining that, in the context of the Karenni, Karen, or other ethnic groups, "the more people are exposed to others, the more self-conscious becomes their identity, defined as it is in opposition to others" (Dudley, 2003, p. 26). Thus, as refugees are forced to interact with individuals from other backgrounds and encounter new, foreign cultures and values, their own sense of ethnic identity often becomes further entrenched and essentialised. South (2007a) acknowledges this trend specifically among Karen forced migrants. "Notions of a homogenous and militant pan-Karen identity are also fostered in the growing diaspora, among refugee and exile communities… for Karen and many other refugee communities, the experience of exile seems to reinforce the most 'hard-line' elements of socio-political identity" (South, 2007a, p. 4). In this transnational context, then, Dudley sees ethnicity as a "political tool," as compared to some primordial notion of ethnic identity (p. 26). One part of this political strategy on the part of ethnic

group leadership is reinforcement through the support of external organisations, explains Dudley. Ultimately, the study notes, securing international humanitarian aid raises global awareness about the situation of Burmese ethnic minorities while also reinforcing its legitimacy and influence with the local ethnic community.

The specific reality of life within the refugee camps along the Thai-Burma border presents an area of particular concern when it comes to the potentially divisive or marginalising influence of Karen leadership. Through the research they conducted in six different Karen refugee camps, Oh and van der Stouwe (2008) found an unequal power distribution among certain sub-groups who dominated camp leadership. The researchers explained that the majority of the camp employees were "Christian Skaw-speaking Karen with close ties to the elites in the camps," suggesting that "they have a vested interest in maintaining the status quo" (Oh & van der Stouwe, 2008, pp. 600, 615). Moreover, their power as NGO staff positions these individuals as "the gatekeepers to supplies and resources and as a crucial link to the world beyond the refugee camps," which makes their likely lack of objectivity quite concerning (p. 600). Due to these concerns, Oh and van der Stouwe concluded that the role of these local NGO staff members must be examined critically and changes must be implemented in order to avoid bias and preferential treatment within the camps, as well as to avoid strengthening dangerously divisive ethnic divisions.

South's (2007, 2011) perspective on the role of ethnicity in the lives of refugees along the Thai-Burma border represents one of the most critical among scholarship in this camp. Approaching the subject from a historical perspective much like Herriden (2002), South traces the trend for "different actors in and from Burma (Myanmar) [to mobilise] political support around sometimes competing notions of

Karen ethno-nationalism" back to the colonial period (p. 1). South documents the fact that Christian elites in particular have sought to impose a homogenous idea of "Karen-ness" on this diverse society. However, attempts at imposing Karen unity from above have often proved divisive in practice, leading to prolonged ethnic conflict in Burma for the past 60 years. Examining the specific role of the KNU in this homogenising process in recent decades, South notes that these constructivist ethnic notions have been legitimised by external entities, including humanitarian agencies, aid workers, and human rights activists. Addressing the danger of KNU's nationalising approach, South warns, "This 'S'ghaw-ization' of Karen society in the borderlands and refugee camps resembles aspects of the military-dominated state's 'Burmanization' of national culture, for which the central Government has been criticized by ethno-nationalist opposition groups" (p. 4). The insinuation of commonalities between the acts of Karen leadership and those of the oppressive Burmese government functions as a stern warning regarding the dangers of attempting to force the unification of a diverse group that has many competing interests.

South (2007a) does acknowledge the re-emergence of civil networks among the Karen in recent years, including the different forms of collaborative networks that have been formed. In spite of this growing civil infrastructure, however, South cites several studies that suggest discriminatory policies within the refugee camps, where "access to services and other opportunities is much easier for Christians and KNU families, than for Buddhists or Muslims" (p. 4). In a later discussion, South (2011) echoes Oh and van der Stouwe's (2008) concerns regarding camp leadership, stating, "international NGOs supplying the refugee camps in Thailand have empowered camp administrations dominated by a self-selecting, Sgaw-speaking, largely Baptist elite,

which the aid agencies accepted as the refugees' natural and legitimate representative" (South, 2011, p. 32). Through their economic support and collaborative efforts with the Karen, South (2011) states, international organisations have unintentionally further strengthened the KNU's association with Christianity and connected notions of progress and modernity that are to a large extent fabricated. As McConnachie (2012) explains, South's impassioned criticism, along with that of other scholars, has directly impacted the scrutiny of many humanitarian aid organisations involved along the Thai-Burma border, prompting these groups to demand further transparency, and leading to the KNU's distancing from camp leadership.

While the scholars in this first camp present several legitimate concerns regarding the KNU's approach to mobilisation along ethnic lines, this literature does fail to recognise the important contributions that Karen collaboration has made to local health care through collaborative medical networks and partnerships with outside aid organisations. This collaborative work combining traditional medical systems with Western biomedical approaches has provided needed health care to refugee communities along the Thai-Burma border, many of which went largely unattended prior to the formation of these networks. The present study strives to make an intervention in current discussions of Karen ethnic mobilisation by incorporating an examination of traditional medical knowledge as a potential tool for self-determination movements.

There is a growing body of literature on Karen ethnic mobilisation that complicates the tendency in existing scholarship to view the situation of Burma's ethnic groups from either a critical or a laudatory perspective. Among the scholarship that defies this binary is the work of Martin Smith (1997), Inge Brees (2009, 2010),

and Ardeth Maung Thawnghmung (2012). In his examination of the history of Burma's ethnic groups, Smith recognises the deeper roots of Christianity in the region that have made conditions for international coordination among Christian communities in Burma more favourable than for other religious and cultural groups. Smith recognises that many Christian leaders and international church workers are already familiar with the specific conditions and development contexts in Burma. Due to this longer history of contact and collaboration, there may appear to be a bias in aid organisations' support of Christian groups within the region, Smith (1997) notes. In contrast to Christianity's international networks, the involvement of Buddhist groups has been more limited, partly due to the political activism of many "monks and monasteries [who] have been involved in anti-government protests since 1988," meaning that "the organisation and practice of the Buddhist Sangha remains a sensitive issue" in Burma (Smith, 1997, p. xxix). Smith recognises that the circumstances in which Burma finds itself today are due in large part to the dynamics of today's post-colonial world, and he also allows that there are competing perspectives in play. "In many respects, ethnicity is an ideology in Burma, which has frequently been described by the country's military rulers as the 'Yugoslavia of Asia'; this, they claim, would similarly fall apart without their eternal vigilance" (p. xiii). Smith (1997) explains, however, that, "In response, minority organisations accuse the mostly Burman leaders of the Tatmadaw of using such pretexts as a guise to try and create an 'ethnocratic' Burman state under their sole control" (p. xiii).

Brees (2009, 2010) also acknowledges the complexity of the situation for Burma's ethnic groups, the Karen in particular. Drawing from fieldwork carried out in Tak province, Thailand, Brees examines the types of transnational networks that

refugees have been able to form in recent years. Through field research conducted in 2006 and 2007 in Mae Sot and Nu Poh camps, Brees examines the transnational flows of goods and knowledge, including remittances exchanged between family members across the Thai-Burma border. Brees also discusses the work of community-based organisations (CBOs) in collaboration with the KNU and other ethnic groups in enhancing the knowledge, support and resources of refugees in the region. Like South and other scholars critical of KNU ethnic mobilisation, Brees (2009) recognises that the Karen leadership's ability to operate at such a highly organised level, "offering services to both people in exile and at home, communicating globally and receiving international funding," reinforces their influence and authority within the community (p. 31). Moreover, the fact that the KNU operates in exile from Thailand means that it inevitably has more influence in the area as well as increased access to international networks and resources, which has enabled them to be recognised worldwide as the representative organisation of the entire Karen community. Thawnghmung (2008) stresses, however, "many Karen live inside the country, close to the border or in Rangoon and the delta zone, and do not necessarily recognise the leadership of the KNU" (as cited in Brees, 2009, p. 34).

In spite of the KNU's disproportionate representation of the Karen community, Brees does acknowledge the organisation's contributions to civil society along the Thai-Burma border. He examines different types of trainings run through CBOs, including those related to health care, hygiene, and human rights, acknowledging the role of these training courses in facilitating development on varying levels, as well as the direct impact that many of them have on the refugee community. "In concrete terms, the health care-related training courses have

significantly increased the capacity of the local health workers to improve the hygiene and medical conditions of their community in the absence of state-provided health care," Brees notes (2009, p. 31). Moreover, these courses deliver critical services to certain hidden or clandestine communities. The CBOs "provide food and health care in the IDP camps, while primary health care and cash transfers propping up livelihoods support IDPs in dispersed hiding sites" (Brees, 2010, p. 290). While Brees discusses the crucial importance of training courses in improving local medical conditions, he focuses on Western biomedicine approaches to health care, failing to acknowledge the significant role of traditional Karen medical systems in localised health care along the Thai-Burma border. This gap in the existing literature points to the importance of the current study to inform the existing research on the promise of traditional medicine to be incorporated into forms of cross-border, transnational collaboration.

In contrast to scholars who are openly critical of the KNU's mobilisation tactics and those who see it as a more complex situation rather than being a solely positive or negative influence, those scholars belonging to the pro-KNU camp applaud Karen authorities' activism. These scholars include Celina Su and Peter Muenning (2005), Sandra Brown (2013), and Kirsten McConnachie (2012). This group of scholarship addresses the Karen leadership's work to serve all border populations, including refugees, forced migrants, and internally displaced individuals – the most vulnerable group. Much of this scholarship places a greater emphasis on advocacy work and activism, and views the KNU as a critical organisation that is satisfying unmet needs, especially in IDP areas. Among the organised support and resources the KNU is recognised for by many of these scholars is their highly

functioning "Departments," which include Foreign Affairs, Education and Culture, Health and Welfare, Agriculture, Defense, Forestry, Mining, Justice, Interior and Religious Affairs, Fishery, Livestock and Farming, Alliance Affairs, Finance and Revenue.

Su and Muenning's (2005) study is based on several years of fieldwork and interviews in northwestern Thailand between 2001 and 2005 with the leaders of an informal school project, as well as numerous heads of households served by the school along the Thai-Burma border. The researchers address the efforts of this informal school, which is run by two Thai individuals, to serve the local population. At the time of the study, the school served approximately 50 children and 150 adults. Su and Muenning (2005) recognise, "it was the project's organic development, flexibility, and lack of official NGO status that rendered it more effective than a formal institution might have been" (p. 37). The researchers explore the Thai school project as a form of social entrepreneurship that was able to negotiate the normal hostility that ethnic minorities from Burma usually face in the region. They conclude, "social entrepreneurship has successfully shifted the political implications of school attendance in the case study community, even de-politicising this assertion of human rights in the local Thai community's eyes" (Su & Muenning, 2005, p. 37). The school also prompted parents to become invested in the programme, reinforcing its success and encouraging their children's performance in school. Su and Muenning see promise in this programme for other similar forms of social entrepreneurship to build internally sustainable projects among the local refugee population in the Thai-Burma area. Most importantly, they find this model particularly productive in situations where impoverished or marginalised communities do not have access to NGO or

governmental resources and services. Due to the strong parallels in political and social circumstances between Su and Muenning's study and the situation of Karen refugee communities, it is likely that the model described by the scholars would be applicable to the local Karen's use of traditional medicine as a tool for self-determination. An examination of this social entrepreneurship model and its potential function within the Karen community context as it relates to traditional health systems is therefore warranted, which is what the present study strives to do.

Brown (2013) also addresses the civil services that local ethnic communities in the region can provide for their own communities. Focusing on the specific case of the KNU and the infrastructure it has established along the Thai-Burma border, she states, "it effectively operated as a *de facto* state and provided a variety of governance services to the civilian population in its areas" (Brown, 2013, p. 95). Examining the decline in traditional internal revenue streams for the KNU over the past couple decades, Brown recognises the renewed strength of KNU programmes resulting from "new, external revenue streams" coming from international aid organisations (pp. 95-6). In particular, Brown emphasises the services provided by the KNU related to education, health, and humanitarian relief. The education service is particularly impressive, notes Brown, with the KNU delivering "possibly the largest education service in a conflict zone in the world, covering 1,041 schools… and 93,842 students in Karen State, some of which are mobile village schools in hiding" (Brown, 2013, p. 97). The high numbers of Karen community members that the KNU education programme reaches in the region demonstrates its sophisticated local networks and the power of the transnational alliances and partnerships it has established with external agencies.

Brown (2013) also acknowledges the specific ability of the KNU to deliver the armed protection that is at times necessary for humanitarian relief to reach the hidden Karen communities, as well as those Karen residing in areas that are sites of more intense armed conflict. The significance of the health care services run in collaboration with the KNU is also noted in this research, although it does not address the usage of traditional medicine. Brown explains that the KNU health department "reaches around 110,000 internally displaced villagers in Karen State through 37 semipermanent health clinics, each staffed by approximately ten local health workers" (Brown, 2013, p. 97). It is likely that the collaborative work of the KNU with the Backpack Health Workers Team (BPHWT), funded and supported by the Global Health Access Programme (GHAP) of Community Partners International (CPI), is being referenced here as well, given that they are the primary source of mobile medic teams that serve IDP communities within Burma.

While the description of the KNU health department suggests that the care delivered primarily encompasses Western biomedical approaches, the fact that such a substantial development infrastructure is already in place suggests the space and potential for expanding health care systems to encompass traditional medicine knowledge into the already established structure. The present study analyses the projects that have begun to implement a more traditional medicine approach, and whether they have potential to broaden health care delivery even further in the region, while also informing and strengthening ethnic self-determination movements.

In fact, Brown argues that the alternative civil services provided by the KNU function as "a nonmilitary method of contesting Burmese state-making practices" (97). Moreover, she asserts, "the messages transmitted through the provision of

welfare services, especially education, undermine the messages transmitted by the Burmese state and allow the KNU to provide alternative information, ideas, and identities to the Karen population" (Brown, 2013, p. 97). While Brown clearly acknowledges the political strategy behind the services and resources delivered to the refugee population, she asserts that this strategy has yielded concrete positive results for the local Karen civilian community, providing support that these individuals would likely not have received otherwise.

The work of McConnachie (2012) is largely in agreement with the position of Brown as well as Su and Muenning. Recognising the ways in which the local refugee community has been supported by the KNU, McConnachie also asserts that the organisation has had a broader positive impact. "KNU involvement in the refugee camps has had benefits for the wider refugee population. In the initial years of refugee settlements in Thailand, the KNU brought political skills and connections to the work of camp management, and KNU leaders took roles in the Karen Refugee Committee" that were pivotal because they had the necessary education, resources, and connections (McConnachie, 2012, p. 46). While the researcher acknowledges the "significant failings" of the structure of refugee camps, she emphasises the critical assets that they deliver, including "popular recognition and support, understanding of the local context, and proven commitment to the community" (p. 47). The organisation's proven commitment to the Karen community, as well as its understanding of the very specific local context, both suggest that the incorporation of traditional medicine into local KNU programmes is feasible and has the potential of being very productive for the Karen refugee community in the Thai-Burma region. It is this potential that the current research strives to examine further.

Stressing the importance of considering all options, McConnachie concludes, "it is by recognising the dual potential of non-state armed groups, as both a resource and a threat, that we can best devise a pathway for potential engagement with such groups" (2012, p. 48). Consequently, this research study explores new ways of developing that pathway for potential engagement through the collaboration between local and global networks via traditional medicine knowledge.

Conceptual & Theoretical Framework

To frame the issues relevant to my study and the situation along the Thai-Burma border, I will briefly address the main humanitarian aid, development and globalisation concepts that will be referenced in this study. In general, issues related to traditional medicine in the forced migration context can be approached through the following social science lenses: history, political science, economics, anthropology, medicine, public health, psychology, education and development. For the current study I have chosen the following lenses: development, public health and anthropology. In particular, my analytic framework is based in endogenous development theory, and also draws on concepts of primary healthcare, and uses of ethnicity within self-determination movements (see Table 1).

Table 1

Concepts and Related Fields

Field	Subfield	Relevant concept
Development	Postdevelopment	Endogenous Development
Public health	Global health	Primary vs. Therapeutic
Anthropology	Civil conflict	Ethnicity

As demonstrated in the following concept diagram (Figure 2), these concepts allow for an approach that validates local and global worldviews, considers the role of

non-Western actors and professionals in the aid and development context, and promotes a fluid and realistic approach to these definitions by highlighting the complexity of ethnicity.

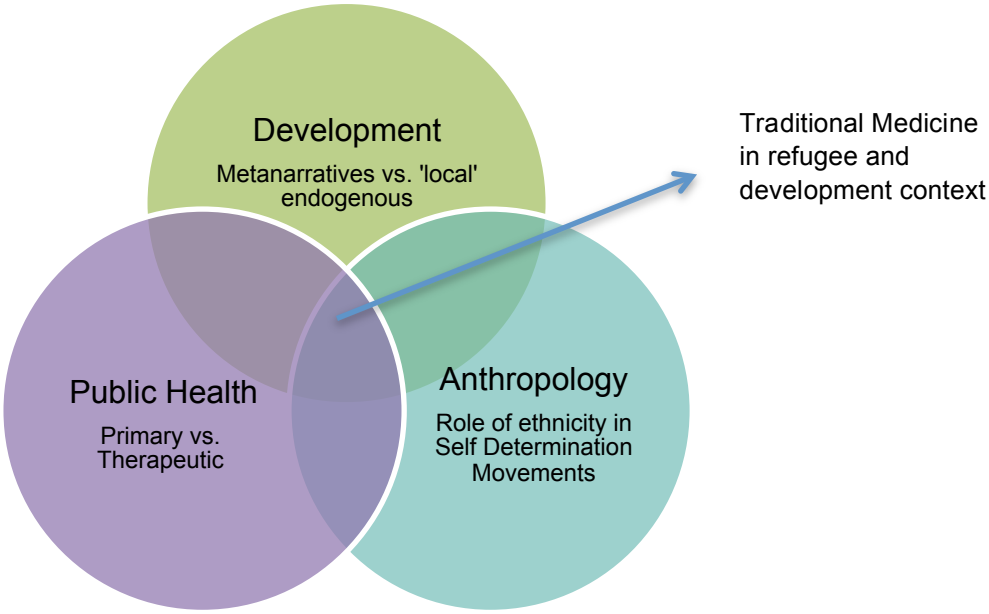

Figure 2. Concept diagram.

Endogenous Development: Sufficient Frame for Traditional Medicine in the Global Context?

In this section, I elaborate on the introduction to endogenous development presented earlier in this chapter, and seek to situate endogenous development theory more concretely within the forced migration context of this study. I will first briefly review the origins of endogenous development theory. Critical development theories began to emerge as early as the 1960s in response to the modernisation focus of international development, which defined progress in strictly economic terms. Early schools of thought during this period like Basic Needs and Dependency Theories criticised classic development, citing the inherent hegemony inflicted by development

agencies and financial institutions in particular. Dependency theories drew a direct correlation between proposed exploitative Western policies and practices, and poverty in the non-Western world, or "global South." Basic Needs theory proposed that development's main focus and resources be targeted at the world's poorest in an effort to protect human rights and boost the global economy.

As discussed in the previous section, alternative development frames that emerged in the 1980s and 90s, known as the postcolonial and "post-development" movements (Arturo Escobar, Akhil Gupta, and James Ferguson were among the most prominent proponents), took their criticism one step further by calling for development to be defined by local agents and on local terms. Post-development theorists specifically emphasised the factors of local agency and pluralism – ideas that align with Amartya Sen's Human Development approach, which focuses on human freedoms.

Endogenous development – within which this study's analytic framework is based – evolved out of the post-development paradigm. A basic timeline of major development theories follows to illustrate the evolution in these schools of thought (see Table 2).

Post-development theory, discussed in detail in the last section, takes a largely critical stance on modern development projects, arguing that the discourse and practice of development perpetuate cultural and economic imperialism, and define the terms upon which impoverished non-Western populations base their understanding and experience of development and progress. Despite its intent to advocate for the agency of the impoverished and oppressed, however, post-development risks falling

into the same dualist framework as modernism and classical development by dividing the world into a global vs. local binary.

Table 2

Overview of Main Development Theories and Paradigms (20th–Early 21st Centuries)

Decade	Main development approaches
1950s	• Modernization theories: all countries should follow the European model • Structuralist theories: Southern countries needed to limit interaction with the global economy to allow for domestic economic growth
1960s	• Modernization theories • Dependency theories: Southern countries poor because of exploitation by Northern countries
1970s	• Dependency theories • Basic needs approaches: focus of government and aid policies should be on providing for the basic needs of the world's poorest people • Neo-Malthusian theories: need to control economic growth, resource use and population growth to avoid economic and ecological disaster • Women and development: recognition of the ways in which development has differential effects on women and men • Human Development (?)
1980s	• Neo-liberalism: focus on the market. Governments should retreat from direct involvement in economic activities • Grassroots approaches: importance of considering local context and indigenous knowledge • Sustainable development: need to balance needs of current generation against environmental and other concerns of future populations • Gender and development: greater awareness of the ways in which gender is implicated in development
1990s	• Neo-liberalism • Post-development: ideas about 'development' represent a form of colonialism and Eurocentrism. Should be challenged from the grassroots • Sustainable development • Culture and development: increased awareness of how different social and cultural groups affected by development processes
2000s	• Neo-liberalism: increased engagement with concepts of globalisation • Sustainable development • Post-development • Grassroots approaches

Note. Source: *Theories and Practices of Development,* by K. Willis, 2011, 2nd ed., Abingdon, England: Routledge.

Endogenous development theory – a successor movement to post-development – has the potential to highlight alternative ontologies and knowledge systems at both a local and global level. As such, this frame provides an opportunity to bridge and complicate the overly simplistic binary seen in post-development and other development theories.

For the present study, I focus specifically on Ayurveda, the regional, and increasingly global, medical system of South and Southeast Asia in which traditional Burmese medicine is rooted. As a non-Western but nevertheless "global" medical system, I propose that Burmese traditional medicine (rooted in Ayurveda) has the potential to shift focus beyond the global vs. local binary reinforced by post development theory, towards a collaborative biocultural frame outlined by endogenous development.[13]

As situations like that on the Thai-Burma border become protracted and aid organisations shift focus from humanitarian aid to development, it is important to examine the agency of individuals and groups, including their roles as both local and global players, within the development ecosystem. Endogenous development allows for this alternative approach, and helps both traditional practitioners and humanitarian aid workers bring "local" systems like Ayurveda to the table as a local as well global force.[14]

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13 The COMPAS (COMPAring and Supporting endogenous development) Network defines endogenous development as an approach that "seeks to overcome a Western bias by making peoples' worldviews and livelihood strategies the starting point for development. Endogenous development moves beyond integrating traditional knowledge in mainstream development and seeks to build biocultural approaches that originate from local peoples worldviews and their relationship with the earth" (Endogenous Development, 2014). According to Dufour (2006), the term biocultural recognises "the pervasiveness and dynamism of interactions between biological and cultural phenomena," advocating a holistic approach to understanding the world (p. 1).

14 Likewise, both Ayurveda and Western medicine can be viewed as local systems. This current frame challenges how we view global vs. local and allows for a more nuanced interaction, with the goal of reducing assumption and value judgments, and building mutual respect.

Use of an endogenous development framework within the Thai-Burma border context would encourage aid agencies to engage, from a position of collaboration, with the existing knowledge and health systems that refugees and migrants bring with them. While the outcome of such an approach cannot be predicted, this conceptual and theoretical approach proposes that the very process of engaging from a position of openness and willingness to learn will shift the standard humanitarian aid and development dynamic in a positive way.

Endogenous development is an approach that currently exists among local and regional NGOs primarily in Africa, Asia, and Latin America (Endogenous Development, 2014). There have yet to be any large-scale interventions from outside (international) aid organisations that have engaged directly with endogenous development. One of the main challenges to a successful intervention by international development agencies would be educating Western medical practitioners and development officials to shift their attitude toward existing regional and global medical systems and encouraging them to actively engage with these systems.[15] As of 2014, the most promising work in endogenous development has been carried out in South Africa, Zimbabwe, and Ghana – all of which were small scale projects involving local and regional NGOs (Endogenous Development, 2014).

Considering the potential for the successful implementation of endogenous development demonstrated by such projects as those seen in Africa, and recognising the unique positioning of the Karen forced migrant population that is already negotiating complex local and global systems of humanitarian aid and development, I

15 Development leaders – policymakers, thought leaders and large-scale multinational institutions – would expect to receive certain incentives or benefits from incorporating alternative knowledge systems into development projects they design and/or fund. I cannot address this in the current dissertation but acknowledge that all paradigm shifts require either high-level goodwill or comprehensive evidence and pressure from below to create change.

propose the application of endogenous development theory to this setting to enable a more egalitarian, dynamic, and collaborative approach to healthcare among this community. This would require that development organisations shift their theory and practices to foster a parallel or integrated approach where theorists, scientists and practitioners from both systems work from a place of respect, remaining open to the potential that each other's knowledge systems may be valid and "scientific." In an endogenous development context, it is important that non-Western systems like Burmese Ayurveda and Karen traditional medicine not be approached as simply local or ancient (outdated) constructs.

In particular, I examine how endogenous development and primary healthcare approaches may further Karen authorities' existing efforts and infrastructure that is already working to strengthen Karen traditional medicine to meet the community's health and social service needs, and to bolster the Karen self-determination movement through youth trainings and other programmes. I posit that the Karen case along the Thai-Burma border, where local Karen organisations and traditional health practitioners (THPs) already strive to work with outside (regional and international) NGOs to meet the needs of their community, is a promising arena for the evolution of a fully collaborative endogenous development system to take hold, with collaboration among local, regional, and international groups and individuals strengthening Karen self-sufficiency through health care in preparation for their anticipated return to an eventual pluralistic Burma.

Primary Care: A Shift Towards Collaborative Health Care

> Traditional medicine refers to health practices, approaches, knowledge and beliefs incorporating plant, animal and mineral based medicines, spiritual

> therapies, manual techniques and exercises, applied singularly or in combination to treat, diagnose and prevent illnesses or maintain well-being. Countries in Africa, Asia and Latin America use traditional medicine (TRM) to help meet some of their primary health care needs. (World Health Organization (WHO), 2002)

As indicated by this World Health Organization statement, TRM encompasses a broad and complex range of practices and knowledge, from medicinal plants to spiritual practices, and from the formalised traditional systems of China and India to more localised "indigenous" systems throughout the world. Traditional practices in Burma have proven to range very broadly in efficacy and safety, from dangerous superstitions to breakthrough anti-malarials, currently "preventing almost one million deaths annually" (Bagozzi, 2003).[16] Prior to discussing the potential merits of a more collaborative approach to health in the development context – in particular as it relates to Burma – it is important to acknowledge that grouping all "non-Western" practices together under the common heading of TRM risks both the safety of patients as well as the integrity and potential value of medicines that exist as integral components of some of the world's oldest medical systems.

Foster and Anderson (1978) developed an anthropological view of TRM systems founded in the belief that all medical systems can be divided into categories of personalistic or naturalistic theories of disease. Personalistic theories relate to diseases that arise from deities, spirits, sorcerers and other non-human forces. These types of theories are most commonly associated with indigenous peoples and certain

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16 WHO elaborates on this: "For example, the Chinese herbal remedy Artemisia annua, used in China for almost 2000 years has been found to be effective against resistant malaria and could create a breakthrough in preventing almost one million deaths annually, most of them children, from severe malaria" (2006).

state societies such as West African societies and the Aztecs, Mayans and Incas. Naturalistic disease theories, in contrast, relate to an imbalance among various impersonal systemic forces, such as body humors in ancient Greek medicine, mind-body constitutions in Ayurveda (doshas), or yin and yang in Chinese medicine. Naturalistic theories have historically been associated with certain "great traditions," or codified medical systems such as Chinese medicine, Ayurveda, Unani, Tibetan, Mongolian, Thai, and Korean TRM, as well as Kampo (Koning, 1998, p. 263). This personalistic-naturalistic classification can also be translated into informal vs. formal systems or those based on oral traditions vs. codified texts.

Traditional Burmese medicine is derived from the principles of Ayurvedic medicine, India's 5,000-year-old medical system, which is based on 54 authoritative texts of "synthesised medical wisdom with strong theoretical and conceptual foundations and philosophical explanations" (Pushpangadan, 2002, p. 5). Ayurveda was introduced to Burma in approximately 640 AD (WHO, 2001; Neumann, 2003a; Bodeker & Neumann, 2012) and has since evolved and adapted to Burmese cultures and traditions. In Burma – and in most countries and regions where TRM is prevalent – codified and indigenous systems, as well as formally and informally trained practitioners, exist side-by-side to meet their populations' needs (Bodeker et al., 2005b). Burmese medicine, although rooted in Ayurveda, is also influenced by the indigenous practices and beliefs of local regions, religions and ethnic groups, including Buddhist, animist and family traditions, as well as spiritualism and astrology.[17]

17 Note regarding formal vs. informal systems and training: the THPs in this current study are not all formally trained in Ayurveda or Burmese Traditional Medicine, but some of their informal training programmes involve the same amount of time, if not more, devoted to theoretical and clinical study as formal degree programmes. An example of the complexity of indigenous vs. codified formal

According to WHO, up to 80% of populations in developing countries rely on traditional medicine for their primary health care (Bodeker et al., 2005b). Since the majority of the world's refugees and migrants originate in the developing world, non-Western medical systems and traditional health practices play an important role in refugees' understanding of health. This suggests that non-Western health systems may serve as a valuable resource for sustainable health service delivery, as well as a culturally appropriate complement to Western humanitarian care.

Acknowledging Western medicine's historic dismissal of traditional health systems, Bodeker (2010) has noted a shift in the biomedical community's attitude towards traditional medicine. "Recent advances in environmental sciences, immunology, medical botany, and pharmacognosy have led to a new appreciation for the precise descriptive nature and efficacy of many traditional taxonomies" (Patwardhan, Bodeker, & Shankar, 2010, p. 243). He added that scientists also recognised "the efficacy of the treatments employed and the appropriateness of their use in terms of their impact on the environment, the community and the society" (Patwardhan et al., 2010, p. 243). Evidence from the Thai-Burma border shows that, although some aid agencies continue to resist engaging in long-term local capacity building with refugee-based health initiatives, some organisations are indeed involving local health practitioners in certain health and wellness initiatives.

One such initiative is seen in the training programmes currently being run by the American Refugee Committee, Malteser International and Shoklo Malaria Unit in refugee camps along the border to teach safe birthing skills to traditional birth

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knowledge can be seen in the case of Indian medicine in which codified Ayurveda uses 2,000 plant species, whereas indigenous, local communities – particularly those in forests and jungles – use over 8,000 species of plants for medicinal purposes (Pushpangadan, 2002, p. 5).

attendants, midwives and community health workers. Another collaborative effort is the Thailand Burmese Border Consortium's home garden programme for refugees within the camps. These programmes are based on similar initiatives promoted in the field of international health and development worldwide.[18] Unfortunately, most of these initiatives focus on training traditional practitioners in Western primary care rather than integrating traditional practices and worldviews into humanitarian or development services.

In the Western development sphere, traditional health practitioners (THPs) are seen as ideal outreach workers, valued for their connections and "embeddedness" in communities, but not for their health knowledge. In these training programmes, THPs are most often expected to set aside their own beliefs and practices in favour of more "modern" biomedical health directives and procedures. These directives may supersede local practices for acute conditions such as multi-drug resistant diseases, rapidly spreading epidemics and emergency care; but they may also negate valuable healthcare and cultural practices (as well as some more complex treatments) that form the basis of traditional health practice. This dynamic reflects the hegemonic relationship between Western interventions and local resources cited in various critiques of the humanitarian and development field (Walkup, 1991; Castles, 2002; Harrell Bond, 2002). The agenda of the developed and donor countries – the dominant power in this relationship – largely defines the structure and priorities of aid

18 Many national governments, as well as a number of United Nations and WHO initiatives, now include traditional birth attendants and community health workers into reproductive health care and HIV prevention programmes. WHO Safe Motherhood Initiatives and other training programmes for traditional birth attendants (TBAs) can be found throughout Africa, the Middle East and Asia, providing training in safe delivery to traditional midwives (Agha, Balal, & Ogojo-Okello, 2004; Smith et al., 2001; Adam et al., 2005; Raisler & Cohn, 2005). Programmes for training and integrating traditional practitioners into HIV/AIDS prevention and tuberculosis education campaigns are also seen in many parts of the world (Raden & Werner, 1985; Green, 1997; Bruce, 2002; WHO, 2002).

programmes, including the strictly Western biomedical approach to refugee healthcare.

With these power dynamics in mind, caution should be used in proposing or implementing any form of collaborative development project. According to Pigg, training programmes for traditional practitioners have been advocated as a way to bridge the gap between the "realities of local peoples' lives and development institutions' visions" (1995a, p. 47). Yet, Pigg cautions that such programmes may also reinforce "the particular global-local power relations of international development" (1995a, p. 47). [19]

Bodeker (2010) proposes four possible dynamics for engagement between these differing world knowledge systems. According to the *monopolistic* dynamic, modern medical doctors are the only practitioners with a right to practice medicine. In a *tolerant* dynamic, traditional medical practitioners are not officially recognised, but they are allowed to practice informally. In a *parallel* dynamic, in contrast, traditional and modern health systems would both be officially recognised and allowed to attend to patients in separate but equal facilities, as is the case in India. Finally, an *integrated* dynamic would achieve the complete merging of traditional and modern medicine in education and practice. This dynamic would establish "a unique health service, such as in China and Vietnam" (Patwardhan et al., 2010, p. 243).

The current study attempts to examine how traditional practitioners, networks and resources may become part of the broader humanitarian network as they exist and

19 It is interesting to note that in earlier refugee health guidelines from the 1970s-80s, traditional health practitioners are treated as integral parts of humanitarian interventions. In an account of a Save the Children intervention for Lao refugees in Thailand camps (1978-79), acupuncturists and traditional midwives were immediately integrated into the camp health clinic. In fact, acupuncturists had to be coerced to join the clinic, where they provided care for otherwise "untreatable" conditions, saving the clinic considerable time and money (O'Sullivan, 1981, p. 12; see also Knaub, 1981).

intact. Rather than adapting their practices to the Western model, this study investigates whether engaging these resources under a parallel or integrated model – as suggested by endogenous development theory – may allow health systems to continue developing and serving their people in a complementary and/or collaborative way.

Framework Summary

Traditional medicine in the forced migration context is impacted by or has the potential to benefit from the concepts and approaches outlined above. This study applies an endogenous development and collaborative health care frame to the ever-shifting and largely localised dynamics and resources made available through the process of defining and defending ethnicity. These concepts allow for an approach that considers both local and global worldviews, considers the role of non-Western actors and professionals in the aid and development context, and – in highlighting the complexity of ethnicity – promotes a fluid and realistic approach to these definitions.

The following chapter reviews the specific research design and methods for this study in order to demonstrate how the topics and concepts discussed in this chapter were measured and examined.

CHAPTER III: METHODOLOGY

In this dissertation, I investigate the revitalisation of traditional Karen medicine by traditional health practitioners and their respective networks along the Thai-Burma border. Specifically, this study examines the role traditional medicine plays in serving the health and social needs of the refugee and migrant community, while simultaneously strengthening self-determination efforts among the Karen ethnic minority population in the area.

Research for this study was conducted using mixed methods and an ethnographic case-study approach over an approximately 8-year period from 2003 to 2011. The research included in-depth fieldwork (2005), on-going secondhand ethnography (2003-2006), and UK & US-based interviewing (2006, 2011). Data was collected directly from approximately 54 traditional health practitioners, students and advocates from the Karen refugee and migrant populations. More specifically, data was gathered through in-depth, ongoing interviews with five traditional health practitioner (THP) key informants; a series of semi-structured interviews with nine additional traditional health practitioners; and in-depth interactions with 40 traditional health practitioners and other involved individuals during 14 meetings of the Karen Traditional Health Network in which I participated. While in the field, I was also able to review archival data from relevant meetings sponsored by Global Initiative for Traditional Systems of Health (GIFTS), and clinic reports from herbal clinics based in refugee and internally displaced peoples (IDP) areas that included feedback from or data on 116 practitioners, trainees and traditional health advocates.

Below I review the research questions that guided this research, my epistemological approach, as well as the setting, sampling, data collection, analysis methods and research limitations.

Research Questions

As discussed in Chapters I and II, prior research has documented that Burma's ethnic minorities rely on shared cultures, social structures and traditions to define and further their self-determination movements. This thesis addresses the following specific questions:

1. How did the Karen traditional medical system evolve into a more formal medical system? Particularly, what was this process like, who was involved and what role did the various individuals and organisations play?
2. How was the evolution of the Karen traditional medical system affected by the larger social, economic and political context in which it existed, and how did it become embedded in larger social and political institutions?
3. How did the more formalised Karen traditional medical system become a resource for addressing health and social service needs among conflict-affected populations (refugees, migrants, IDPs) and what role did it play in relation to existing humanitarian aid services?

Epistemological Approach

Below I describe the epistemological framework from which I approached this research. My approach is based in a constructivist frame as it is defined by Guba and Lincoln (1998). According to this definition, constructivist research refers to an approach that is simultaneously transactional, relativist, and subjectivist. Viewing the world through a transactional perspective suggests that truth is constructed out of

interactions between people and individuals' own thoughts. A relativist stance supports a transactional viewpoint in that relativism indicates a belief that no objective reality exists and that there are therefore a diverse range of interpretations that people can apply to understand the world and their experiences in them (Guba & Lincoln, 1998). Lastly, a subjectivist approach regards reality as objectively unknowable, calling for the researcher to construct one impression of that reality as they perceive it (Guba & Lincoln, 1998). Subjectivism is closely related to interpretivism, which calls for understanding every phenomenon within its specific context (Charmaz, 2006). Acknowledging that individuals construct their own subjective meanings from their experiences and the world around them, an interpretivist approach thus strives to understand phenomena by gaining access to the meanings that individuals attach to them. Both constructivism and interpretivism thus inform the current study.

The endogenous development frame that guides this study emphasises a horizontal collaborative relationship between local, national, regional, and international entities that remains open to the contributions of external sources as long as the control remains with the local population. The constructivist and interpretivist epistemologies within which the current study is based complement the endogenous development perspective in their emphasis on a "passionate participant" position that facilitates the construction of a "multivoice" meaning (Guba & Lincoln, 2005, pp. 195-6). This approach privileges a qualitative methodology that relies on rich contextual descriptions and emphasises understanding of participant experience over empirical data or a positivist paradigm. Based on this epistemological framework, I

used ethnographic case-study methods informed by grounded theory to complete this research study.

The ethnographic case study methods employed in this study were based on a grounded approach. Similar to the approach taken by grounded theorists (e.g., Glaser & Strauss 1967; Strauss and Corbin 1990), such an approach places "priority on the phenomena of study and seeing both data and analysis as created from shared experiences and relationships with participants and other sources" (Charmez 2006, p. 130). Through this process, I allowed the data collected to guide my study by analysing the unstructured data and identifying themes that were central to my research topic of traditional medicine as an ethnic tool for self-determination movements and a valuable alternative form of health care for distressed communities, particularly forced migrant and groups of internally displaced people. Closely related to phenomenology, grounded theory is also an emergent strategy that seeks to identify meaning from different individuals' experiences and perceptions of a certain phenomenon. Both rely on a descriptive approach to allow the salient themes in the research to crystallise. However, my preference for a revised grounded theory approach stems from the understanding of the researcher's role as directly engaged with that of participants. This allowed for me to collaborate with my research participants as co-producers to reconstruct collective meaning from the existing multiple perceptions and realities (Guba & Lincoln, 1989).

The conceptual framework for this research (discussed in detail in Chapter II) was developed based on an analysis of the existing theoretical approaches to determine which best engages with the unique dynamics of a forced migration context like those seen on the Thai-Burma border. A modern or dualist approach was

dismissed as it generates a top down model that is believed to increase poverty and disparity in developing regions. While a development paradigm, in contrast, has allowed for critique of historical systems like colonialism and the emergence of some postmodern alternatives[20], science and biomedicine remain too rooted in a rigid binary. A post-development or relativist approach as advocated by Escobar (1991), among others, allows for multivariate inputs and definitions of development while simultaneously idealising the local, which consequently falls back into the polarising binary of global vs. local. Finally, a practical solution grounded in engaging multiple global metanarratives through models of endogenous development and collaborative health care will allow for a biocultural engagement with world medical systems.

Figure 3 below highlights how modern philosophy, which has informed social order, politics and economics since the Enlightenment, has been subjected and reactive to postmodern critique and alternatives. Development, which encompasses economics, politics, history, sociology and anthropology, has followed philosophy's same basic trajectory and adapted to postmodern inquiry and influence. Science and Western biomedicine, on the other hand, have largely escaped postmodern critique and adaptation. Instead, they remain stuck in a dualist, positivist approach.

20 Development experts continue to call for postmodern analyses of their theory and practice. For example, Monsutti's recent work (2012) cites the need for a more expanded approach to development interventions in Afghanistan, noting that 'the growing literature on insurgency and counterinsurgency issues… largely ignores the theoretical debates on subaltern studies, postcolonialism, and globalization that currently animate the social sciences" (p. 564).

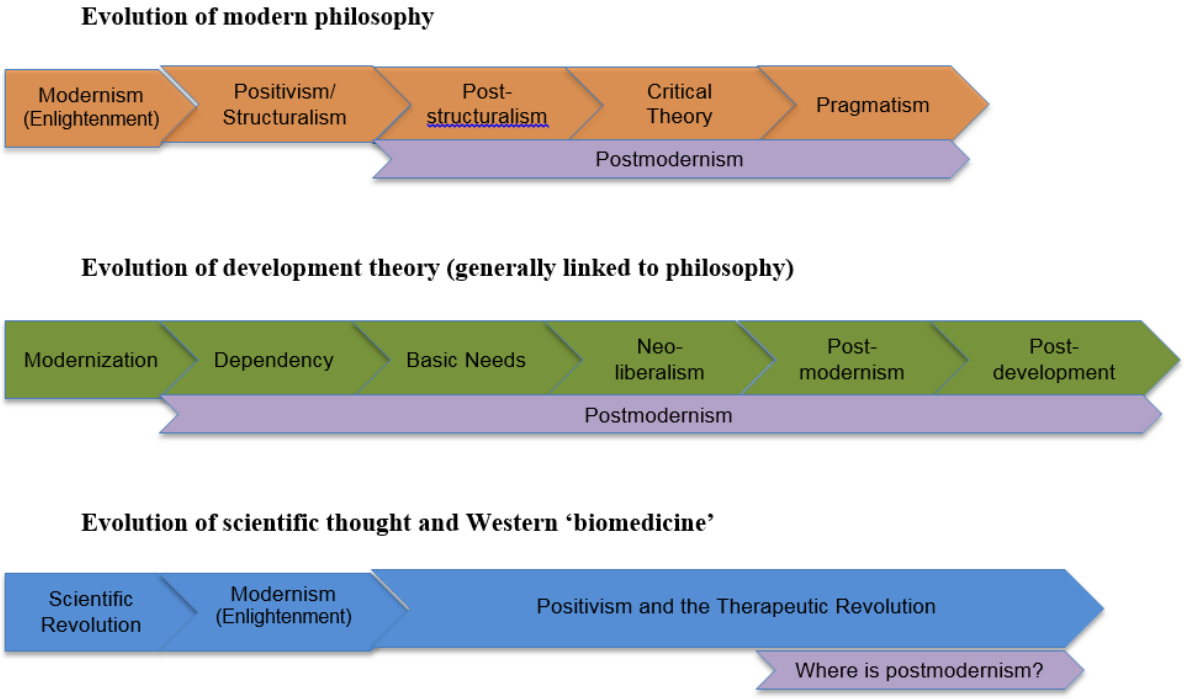

Figure 3. Comparative trajectories of modern and postmodern thought: philosophy, development and science/medicine.

The concepts and findings presented in this study demonstrate that biomedicine may benefit from a postmodern movement. More specifically, it uses the current case (Karen traditional medicine along the Thai-Burma border) to explore the potential impact of shifting away from the biomedical assumptions and practices that dominate humanitarian aid interventions. Through this process, the study aims to open questions as to whether this type of shift in the humanitarian aid paradigm could create ripple effects in the fields of development, public health, and the intersections between health and development.

Setting and Key Organisations and Networks

Research was conducted among the Burmese refugee and migrant populations along the Thai-Burma, specifically along the Thai border adjacent to Karen State, Burma (see Figure 4). The majority of my study participants move regularly between

refugee camps, conflict areas within Karen and Karenni State, and the Thai border towns such as Mae Sot.

All Burmese refugee camps situated in Thailand along the Thai-Burma border are run by the United Nations High Commissioner for Refugees (UNHCR) under Thai government mandate (UNHCR, 2013). Among these are six camps that shelter mainly Karen ethnic minorities, which are: Nu Poe, Umpium, Mae La, Tham Hin, Mae Ra Moe/Ma La Oo. Within Thailand, the cities of Mae Sot, Bangkok and Mae Sariang are the main urban hubs for local and international NGO operations (see Figure 4). Mae Sot in particular hosts Cooperative for Assistance and Relief Everywhere, Inc. (CARE), Thailand Burmese Border Consortium (TBBC), Aide Medicale Internationale (AMI), Shloko Malaria Research Unit (SMRU), Médecins Sans Frontières (MSF), Zuid Oost Azie (ZOA - a Dutch education & vocational training NGO) and UNHCR, as well as dozens of small local NGOs and Karen advocacy, education and rights groups. There are also a number of Burmese advocacy groups in the city of Chiang Mai, although they remain fairly low profile given that Chiang Mai is a large tourist center in Thailand, and local stakeholders do their best to ensure that Burmese refugee issues and organisations remain out of sight. Due to its proximity to the Karen refugee camps and traditional practitioner networks, Mae Sot served as my primary base of operations during my fieldwork in the region.

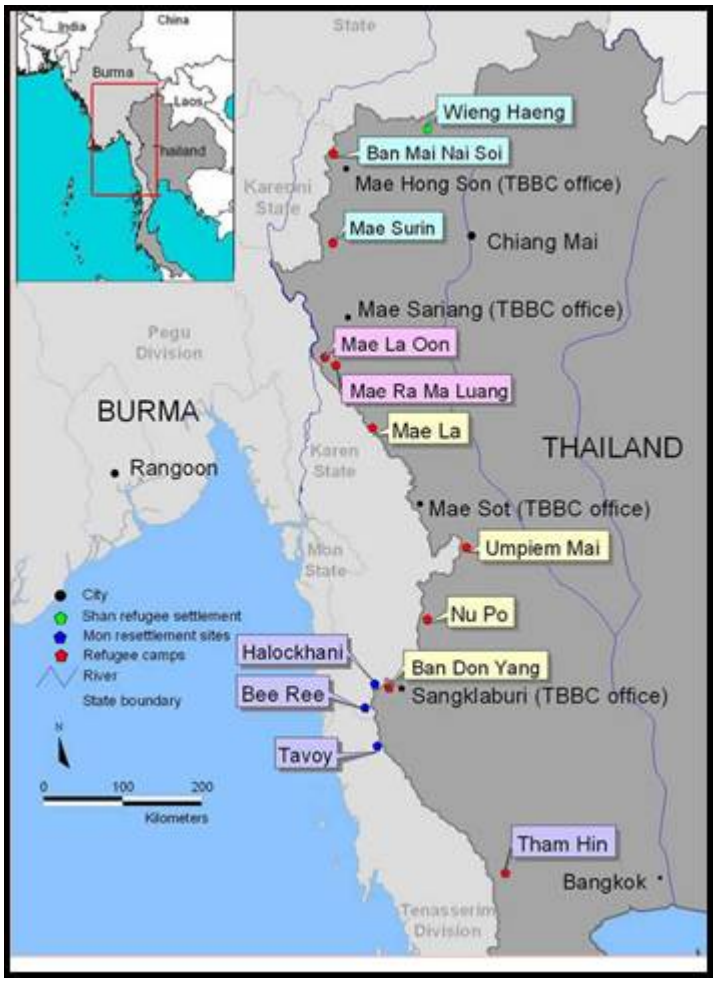

Figure 4. Local and international NGO operations in Burma.
From "Map of Thai-Burma Border," Australian Karen Foundation, n.d. Retrieved Feb. 12, 2014 from http://australiankarenfoundation.org.au/9.html.

Key Service Provider Groups and Networks

My research focuses on traditional medicine-related efforts undertaken by five Karen authority and/or service provider groups and their networks of practitioners and advocates. These groups include: the Karen National Union's Karen Department of Health and Welfare (KDHW), the Mae Tao Health Clinic, the Backpack Health Worker Team (BPHWT – supervised in-part by Mae Tao and KDHW), the Karen Environmental and Social Action Network (KESAN), the Burma Medical Association (BMA) and the Karen Forestry Department (KFD). For ease of reference I will refer to this group as the Karen Traditional Health Network or Karen Network. These

organisations and their recipient populations are briefly described below (they will be described in more detail in Chapter VI).

The Karen Department of Health and Welfare (KDHW) manages 35 mobile clinics staffed by over 200 medics (in addition to the BPHWT) throughout IDP areas. KDHW maintains an administrative staff at the Thai-Burma border, and claims responsibility for the "physical and mental health of all people living in Karen State," with a target population of 100,000 IDPs.

Mae Tao Clinic is a free clinic supported with international aid. Founded by Dr. Cynthia Maung in 1989 after student uprisings, Mae Tao serves as one of the main bases and conduits for organising local and international aid for Karen migrants and IDPs. The clinic estimates that it serves a total beneficiary population of 150,000 to 200,000 migrants, IDPs (50% economic migrants, 50% cross-border migrants/IDPs), and in select cases refugees from the border region.

The Back Pack Health Worker Teams (BPHWT), managed by KDHW in partnership with select international non-profits, utilises mobile health teams to provide primary medical care, maternal and child health services, and community health education and prevention programmes to internally displaced and vulnerable populations in Burma. The BPHWT currently collaborates with eight major ethnic groups to manage 80 teams (289 medics) serving over 187,000 people in eastern and western Burma.

Karen Environmental and Social Action Network (KESAN) is a non-profit organisation working alongside local communities in Karen State to promote indigenous knowledge, capabilities and gender equality with a focus on enriching livelihoods and biodiversity, raising awareness on environment and climate change,

supporting community-based livelihood initiatives, and advocating for policies that ensure people's participation. KESAN has an operational centre in Chiang Mai with 11 staff, and a training centre in Mae Lama Luang refugee camp, Thailand.

The Burma Medical Association (BMA) is a refugee doctors' association in Mae Sot. Founded in Karen State in 1991, it works together with local ethnic health organisations in Burma to train health workers (including traditional health practitioners) to deliver primary health care to a target population of approximately 200,000 refugees, migrants and IDPs.

Finally, the Karen Forestry Department (KFD) is a formal department of the Karen National Union, and focuses on managing forests in KNU-controlled areas, as well as providing training in sustainable community forest management.

In addition to these Karen groups, the Global Initiative for Traditional Systems of Health (GIFTS of Health), an Oxford-based NGO, served as the external catalyst and facilitator for group meetings and for knowledge preservation and documentation processes. [21] GIFTS activity along the Thai-Burma border began in early 2001 at the request of Dr. Cynthia Maung, founder of Mae Tao refugee and migrant health clinic and leader of the BMA.

Economic migrants, forced migrants, IDPs, and refugees (at times) move fluidly between health clinics and providers in the Thai-Burma border region. In fact, one of the largest refugee camps, Nu Poe, reports that 50% of outpatients and 36% of inpatients to their humanitarian agency-run clinics come from 16 surrounding villages

21 GIFTS of Health is an Oxford, UK-based organisation founded in 1993 with the aim of building partnerships at a global level between traditional (i.e. indigenous) health practitioners, scientists, educators and decision-makers, in order to improve health services, especially in rural areas of the developing world (http://www.giftsofhealth.org).

on both sides of the border. This fluid population was also the target of the group of Karen organisations under investigation in this study.

In late 2000, concerned that forced migrants along the Thai-Burma border had inadequate access to modern medical services, and were also no longer able to utilise local medicinal plants due to conflict and forced displacement, the BMA passed a resolution calling for its members to begin documenting and strengthening traditional medicine resources along the border. At the same time, KDHW, led by Dr. Hsaw Thein – himself a senior herbalist – was interested in formalising traditional health resources and services available along the border. GIFTS was invited by Dr. Cynthia and BMA to assist in the coordination of these efforts.

This network of Karen practitioners and organisations[22] (the *Karen Traditional Health Network*) held its first meeting and knowledge exchange programme in July 2001. Over time, the *Karen Traditional Health Network* developed objectives related to understanding population-based needs; supporting networks of traditional practitioners in their efforts to meet these needs; and documenting and formalising Karen traditional medicine. As mentioned above, each organisation had a pre-existing interest in or focus on traditional medicine, but prior to 2000 these groups were not systematically coordinating efforts across groups (more in Chapter 6 on the evolution of this *Karen Traditional Health Network*).

The groups that make up the *Karen Traditional Health Network* operated in and around Mae Sot. Mae Sot, set 5 kilometers from the Burmese border along the Moei River, is the largest border town along the Thai-Burma border and hosts an

[22] With the exception of KESAN and KFD. KFD did not join meetings but was engaged as needed by KDHW. KESAN entered this network in 2005.

estimated 41,158 inhabitants from over 20 ethnic groups, including Karen, Karenni, Pa-O, Hmong, Yao, Lahu, Buddhist and Muslim Burmese (Irawaddy, 2005). Hundreds of Burmese migrants cross the river every day to find work, healthcare and engage in trade; and some estimate that the majority of Mae Sot's population is indeed made up of Burmese migrants (Irawaddy, 2005).

Research Logistics

Since Mae Sot served as the base for dozens of small local NGOs and Karen advocacy, education and rights groups, including those involved in my study, it was the natural meeting spot for many of my individual and group meetings and therefore became my base of operations. My meetings, interviews and observation took place in Mae Sot and surrounding villages, including the Mae Tao clinic and the Karen Department of Health and Welfare (KDHW) headquarters. Some meetings were also held at a monastery situated 10 kilometers outside of Mae Sot. In addition, a number of meetings took place in Chiang Mai and Mae Seriang.

Sampling

To ensure that I spoke with as wide a range of individuals involved in the process of providing and advocating for Karen traditional medicine, I used a purposive sampling approach. This included using non-probability and snowball sampling techniques to identify traditional practitioners and health workers, as well as identifying and cultivating key informants who could help provide more in-depth insights into how the Karen traditional health system worked and was evolving.

Sampling Approach

My sampling for this study falls under the category of nonprobability sampling. This sampling process is also referred to by Patton (2002) as purposeful

sampling, wherein "cases for study (e.g., people, organizations, communities, cultures, events, critical incidences) are selected because they are "information rich" and illuminative… they offer useful manifestations of the phenomenon of interest; sampling, then, is aimed at insight about the phenomenon, not empirical generalization from a sample to a population" (p. 41). More specifically, I employed a combination of convenience and snowball sampling to recruit Karen practitioners and authorities who were currently supporting or practicing traditional medicine in the border region.

As is typical in ethnographic case studies like this, I began recruiting participants through a convenience sample of traditional health practitioners engaged with initial GIFTS of Health workshops in 2001. This initial set of traditional health practitioners was invited by the generally apolitical Mae Tao Clinic to attend this first GIFTS workshop. The open call was delivered throughout the Thai-Burma border region, and practitioners joined from numerous border camps and villages.

The advantage of snowball sampling is that it provides a method for accessing vulnerable and hidden groups. Trust was built between myself and key informants who then referred me to otherwise inaccessible (unreachable) informants. For example, prior to my initial research in the Thai-Burma border area, refugee health workers had informed my colleagues and I that there were no traditional health practitioners or traditional medicine use by refugees in the area (Bodeker et al., 2005a). At the same time, Dr. Cynthia Maung was eager to investigate and collaborate with traditional practitioners along the border – in particular those serving internally displaced populations. In order to gain access to more reliable informants that would help uncover traditional practitioners – if any – along the border, we

needed to engage directly with the communities through on site fieldwork. Only by spending time along the Thai-Burma border and using snowball sampling – asking for referrals within the community – were we able to access these otherwise invisible resources associated with traditional medicine knowledge, use and THPs within the refugee/IDP population.

The drawback of snowball sampling is that the researcher may only become linked into one social network, meaning that "isolates" are ignored (Atkinson & Flint, 2001). For example, I received reports from Richard Berkfield that there is a very active traditional health practitioner in one of the refugee camps on the Thai-Burma border (reportedly seeing 2,000 patients within 3 months), yet he was not connected to the traditional health practitioners with whom I had been in communication. While I strove to offset this bias by establishing additional connections within the area and widening my network access, it is likely that I did not engage with every traditional practitioner or traditional medicine-involved individual in the region. These limitations will be discussed further later in this chapter.

Although this sample is not statistically representative of the entire border region, the diverse backgrounds of these key informants helped me gain access to a substantial number (n = 116) and variety of traditional health workers, advocates, NGO workers and resources along the border. Throughout the course of my study I was able to gather data from participants who came from a total of six refugee camps, two border towns and approximately 30 border villages. Below I describe the kinds of study participants I was able to speak with.

Diverse Types of Study Participants

In all, I compiled information on or from 170 participants. These participants included the following:

Key Informants

My sample included five key informants that came from three Karen refugee camps and one Thai village along the Karen State-Thailand border area (mid-southern part of the border). Three were Christian, one Roman Catholic and one Buddhist, but all were Karen, and all were refugees or migrants fleeing oppression in Burma. These informants' training and experience in traditional medicine ranged from 15-35 years, and all but one was a senior herbalist or master practitioner. With the exception of one, a monk who resided primarily at his temple, all of these key informants were fairly mobile and actively engaged in health and traditional medicine advocacy beyond their own camps and well into the IDP areas. Their experience stemmed from informal training processes that led them to classify themselves as herbalists, alchemists, masseurs, spiritual practitioners, traditional birth attendants and midwives, or bone-setters.

Additional Traditional Health Practitioner Informants

My data also includes in-depth, semi-structured interviews conducted through primary interviews with nine additional traditional health practitioners. Five of these informants play important roles in the traditional medicine programmes and clinics at Nu Poe, Umpium, Mae Ra Ma Laung/Mae La Oon and Tham Hin camps.

Individuals Who Participated in Group Discussions and Training Meetings

I also collected additional data from approximately 40 traditional health practitioners, health workers and staff involved in traditional health services along the

border. These data were gathered during a series of 14 group discussions and training meetings held in the Mae Sot and Chiang Mai regions (see below for more detail). The first of these meetings were convened by GIFTS of Health in 2001-2002, and the remainder were held during my research period in 2005-2006. This group of study participants was quite diverse and included individuals with are variety of traditional backgrounds, including herbalists, alchemists, monks and midwifes. They came from different refugee camps and worked in various clinics and health-related organisations in the Karen region. The diversity of this group of study participants is represented in Table 3.

In summary, I worked directly with a diverse sample of 54 primary participants (i.e., five key informants, nine additional traditional health practitioner informants and 40 individuals who participated in the group meetings and discussions) all of whom had experience and expertise related to traditional Karen medicine. As shown in Table 4, these primary participants were affiliated with a variety of organisations which help provide me with a broad understanding of the context in which Karen traditional medicine was being practices in the region. Table 5 shows how the primary participants were distributed by camp and region.

Indirect information on other involved individuals. During the research period, I also obtained information on 116 additional practitioners, students, clinic staff and traditional medicine advocates operating in the region through archival and document reviews. The list of documents reviewed is found in the section on indirect data collection below. Information from these sources were validate via in-depth interviews with representatives from each of these organisations.

Table 3

Group Interview Participants

ID	Position	Affiliation	Base
KN	Director	Burma Medical Association	Mae Sot
MMT	Senior trainer	Mae La herbal clinic	Mae La camp
UAPS	Herbalist	Mae La herbal clinic	Mae La camp
PMK	Herbalist	Mae La herbal clinic	Mae La camp
SET	Herbalist	Mae La herbal clinic	Mae La camp
NS	Alchemist	Mae La herbal clinic	Mae La camp
SW	Alchemist	Mae La herbal clinic	Mae La camp
HRM	Assistant director	Nu Poe herbal clinic	Nu Poe camp
MN	Jungle herbalist	Independent (?)	Nu Poe camp
NTN	Herbalist	Independent	Nu Poe camp
ET	Assistant director	Umpium herbal clinic	Umpium camp
TK	Herbalist	Umpium herbal clinic	Umpium camp
H/TS	Medical director	BPHWT	Mae Sot
SWR	Herbalist in-charge	BPHWT	Mae Sot
EKSO	Administrator	BPHWT	Mae Sot
EN	TBA	Independent	Mae Sot/Mae La
SWSN	Monk and herbalist	Mae Sot monastery	Mae Sot
LH	Director of herbal programme	Herbal programme	Mu Traw, N. Burma
HE	Director of herbal programme	Herbal programme	Pa An, Burma
SMA	Herbalist & director	S. border herbal clinic	Burma
SSTR	Herbalist	S. border herbal clinic	Burma
ND	Herbalist	N. border herbal clinic	Burma
NA	Female herbalist	NA	NA
NA	Trained midwife	NA	NA

Note. Group participants also included approximately 15 health workers and staff from local Karen health departments and programmes, including the Backpack Health Worker Training programme (BPHWT), which is based in Mae Sot.

Table 4

Organisational Affiliations of Primary Participants

Affiliation	Total
Burma Medical Association	1
Backpack Healthworker Dept.	4
Burma (IDP areas)	6
Independent	8*
Karen Dept. of Health & Welfare	2
Mae La herbal group	6
Monastery	3
Nu Poe herbal clinic	3
TBA groups	2
Than Hin herbal clinic	1
Umpium herbal clinic	3
Mae Tao & BPHW (other)	15
TOTAL	54

Note. * 3 involved in network; 5 working alone.

Table 5

THP Participants by Camp or Region

Region	Total
Burma (IDP areas)	6
Mae La camp	8
Mae La Oon camp	1
Mae Sot (12+15 other)[23]	27
Nu Poe camp	5
Tham Hin camp	1
Umpium camp	4
Not Available	2
TOTAL	54

23 Mae Sot appears overrepresented here because, with the exception of five THPs permanently based in Mae Sot, all are refugees or migrants from Karen state who live in or use Mae Sot as a base for work, meetings, or organisational headquarters – although their service areas encompass the broader border and IDP areas. This sample also includes ~15 group meeting participants, mainly stemming from BPHW and the Mae Tao clinic in Mae Sot.

In all, 170 research participants and informants, came from six Karen refugee camps, including Nu Poe, Umpium, Mae La, Tham Hin, Mae Ra Moe/Ma La Oo; two towns; and over 30 small villages along the Thai-Burma border, covering an area which spans approximately 1,300 km in length. Given that traditional practitioners and health workers involved in my research travelled regularly between refugee camps, IDP areas and Mae Sot for supplies, meetings and work, I aimed to make my interviews and meetings coincide with such business.

Local and international NGO officials. In addition to speaking with a variety of different kinds of traditional health practitioners, I also interviewed local and international NGO officials. All of these organisations were focused specifically on local needs, capacity building, and partnerships with the traditional health practitioners involved. Hence these are not 'INGOs' or humanitarian aid organisations in the classic sense, although they are all conducting aid work in some form along the border. These partners are profiled above and include groups like the Global Initiative for Traditional Systems of Health (GIFTS), the Burma Medical Association (BMA), and the Karen Environmental and Social Action Network (KESAN). One of the main functions of these NGO partners has been supporting and bolstering existing THPs and traditional health resources through programme development, funding for clinics and training programmes, and facilitating centralised meetings in camp or town centers.

To further enrich my understanding of the larger regional context, I also conducted informational interviews with select aid workers to gain insights into their perspective on the situation. To collect this data, I interviewed staff from several humanitarian NGOs in the area, including: Shloko Malaria Research Unit (SMRU),

United Nations High Commissioner for Refugees (UNHCR), Cooperative for Assistance and Relief Everywhere, Inc. (CARE), and the Burmese Refugee Center (BRC), American Rescue Committee, Aide Medicale Internationale, Human Rights Institute of Burma, Johns Hopkins and Mae Tao refugee clinic, Zuid Oost Azie (ZOA – a Danish Educational NGO), International Rescue Committee, Thailand-Burmese Border Consortium, and the Committee for Services to Displaced Persons in Thailand (CCSDPT). While this information did not serve as a primary group of data for analysis, it constituted background information and validation for primary data throughout the data collection and analysis process. As such, this information was considered when I was drawing my research conclusions following the completion of the study.

Migrants and IDPs in border area. In addition to speaking at length to traditional health practitioners, health workers in the IDP camps and leaders and staff at local and international NGOs, a colleague and I also conducted a short survey with a convenience sample of migrants and IDPs in one of the refugee camps that focused on refugee and migrants' relationship with traditional medicine resources in the study region.

Following the first Karen Network meeting in July 2001, it was clear that a range of traditional health practitioners and researchers were available and practicing in the Thai-Burma border region. Questions arose about needs among the population, and I was invited by GIFTS to design and develop community surveys on refugee and migrant desire for and access to traditional medicine resources in the conflict and displacement setting.[24] The baseline survey was conducted for my Master's thesis in

24 Research conducted for my Masters in Public Health in forced migration and health at Columbia University, NYC.

December 2002, and a follow-up survey was conducted through a University of Southern California research project in July 2007 to validate initial findings and explore additional aspects in treatment-seeking behaviors and barriers.[25][26]

Data collection for these baseline and follow-up surveys consisted of a convenience sample of 59 respondents (118 combined across the two samples) at Mae Tao Clinic. Respondents were migrants and IDPs from the border area. In the 2002 survey, 71% of the respondents were women, while in the 2007 survey, only 52% were women.[27] The majority of the respondents in both samples were Karen, followed by Burman, Mon, and other ethnicities such as Pa-O, Shan and Indian.

As part of the surveys, participants answered closed- and open-ended questions pertaining to the following issues: their own traditional medicine knowledge and beliefs; their access to and use of traditional medicine both before and since migration/displacement began; and their perceived need or desire for access to traditional medicine in their current setting. The goal was to determine population-based need and inform the Karen Network about best methods for accessing this population and providing care. Since the first sample was conducted prior to my Ph.D. research, and the second sample was collected by a colleague, I treat both as secondary data (see below).

Data Collection

Data was collected through semi-structured and in-depth interviews, focus groups, direct observation and second-hand ethnography, as well as secondary data

25 This follow-up survey was conducted through "second hand ethnography" by University of Southern California medical student Andrew Shubov, and provided useful validation for the 2002 survey.

26 Please note that findings from these studies have been presented as discrete outcomes in prior theses and publications. They have not, however, been analysed comparatively as they are here.

27 The 2007 survey sought to recruit more evenly across gender lines.

and document review while in the field. These ethnographic methods were chosen to allow for multiple perspectives on the same phenomena. For work which focuses on the perceptions and viewpoints of multiple stakeholders, ethnographic methods can be more representative of reality, and make space for relevant themes, participant perspectives, and alternative worldviews to organically emerge. This choice made sense not only because this specific issue has never been studied among the Thai-Burma border population, but because the high risk and fluid nature of this forced displacement context would not have allowed for a more structured approach.

Interviews

As introduced above, data collection occurred through a series of semi-structured interviews, in-depth interviews and focus group meetings with traditional practitioners and local NGO representatives. This overall elicitation approach was exploratory in nature and allowed participants the freedom to bring up different topics and reflect on issues that might not have otherwise been addressed in a highly structured interview format. To allow for this organic process, I followed ethnographic research guidelines and tried not to steer or lead conversations. I used classic ethnographic question formats during these individual interviews that allowed me to explore specific themes in-depth as I saw fit and deemed appropriate (see examples below). These included asking grand-tour questions (Spradley 1979), follow-up and elaboration questions, and more specific probes depending on how the semi-structured interview flowed. Below I describe the general interview topics I covered, the kinds of formats I used, and the logistics associated with conducting, translating and recording these interviews.

Interview topics. In addition to varying by type of participant, my interview protocols also varied over the duration of my study and were adapted as I learned more. In general, I focused my attention on the following broad areas of interest:

1. Service priorities – health vs. system-focused: This set of questions explored the degree to which meeting health needs was a priority for each practitioner or group of practitioners vs. priorities related to developing the Karen traditional medicine system/infrastructure, such as training youth, preserving knowledge, building gardens, contributing to herbal handbook development, etc. Priorities were often complementary, but probing questions into time-use in each area helped determine specialisation and expertise of each practitioner.
2. Health needs: If meeting health needs was a primary driver, what were the highest priority needs and ailments practitioners aimed to address, for example, acute, common, conflict-related, psychospiritual, etc.? What changes or trends had they observed over the years and in each geography in terms of refugee/migrants' most common and acute needs?
3. Profile of patients: This included basic demographic information, as well as perceived drivers for health-seeking behavior. Demographic questions focused on trends and/or most common profiles of patients in each service area (refugee camp, IDP area, border clinic): age, gender, ethnicity, place of origin, family status (especially re: dependent care, i.e. parent, child, spouse, etc.). Health-seeking behavior included reasons for seeking traditional medical care, history of Western vs. traditional medical care, challenges faced when seeking care, prior knowledge of traditional

medicine, home use – if any, and desires for access to traditional medicine in the future.

4. Common ailments: Building on the above categories, these questions narrowed in on the most common ailments facing refugee and migrant populations and helped contribute data to the herbal database. Practitioners were asked to differentiate between which illnesses were common/prevelant prior to or despite conflict, and which are related to conflict and displacement. Further questions on symptoms and diagnoses were also asked.
5. Treatment protocols for a range of conditions: During meetings focused on database development, practitioners were asked in-depth about traditional medical treatments for a range of common, acute and chronic health conditions faced by the border populations. Although I helped initiate and ask probing questions, these exchanges were led mainly by master practitioners/key informants during the research period.
6. Development of clinics and services in the border area: This included gaining a more thorough understanding of grassroots clinics, training programmes, herbal gardens, etc. For example, I asked about key drivers or catalysts, such as events (surges in conflict), population-based demand, grassroots leadership or outsider interest that spurred the establishment or more formal development of each effort. I also asked about leadership, recruitment, team/group dynamic, barriers (see below), and community involvement in each effort.

7. Security and conflict barriers to practice and collaboration: This included querying my informants about how they were able to: move from place to place, access plant-based materials needed to produce medicines, negotiate Thai security forces or Burmese military, manage inter-group dynamics, secure resources and support, educate communities and patients, and more.
8. Interaction with outside structures: I was particularly interested in the role that international NGOs, researchers and Thai authorities played in influencing Karen traditional medical practices and their evolution. I probed my informants about their interaction with the various entities and how these helped and/or hindered their practice of traditional medicine. This also included the potential for and interest in collaboration between refugee and humanitarian NGOs.

Interview formats. My interview techniques varied depending on who I was interviewing. For example, I conducted multiple in-depth interviews with my five key informants. Each informant was interviewed extensively on an individual, private basis about a range of overarching themes, which included but were not limited to: refugee health; traditional medicine practice and theory; detailed medicinal and treatment information; network building; interaction with local and international NGOs; and refugee/IDP health priorities. Because, I was able to interact with my key informants more often than other participants, these interviews tended to be more ethnographic and somewhat less formal and structured.

With the nine additional traditional healers, I used a more semi-structured format since I assumed I would only have one opportunity to speak with them. They covered similar topics to those covered with my key informants.

For participants who participated in the group meetings, I used a combination of interviews and observations with participants during KDHW group meetings related to traditional medicine programme development, networks, and eventually the participatory process of developing an herbal manual for refugee use (see Chapter VI for more detail). Traditional health practitioners and other participants also discussed many of the same themes addressed in individual interviews during these group meetings, with primary emphasis placed on the network's training programme and community development. Treatment protocols and refugee health needs were themes discussed throughout all meetings and interviews with health practitioners.

I used semi-structured formats for all my interviews with leaders and staff from NGO and humanitarian aid organisations. For these interviews, I focused primarily on: current services offered and population served; knowledge about traditional medicine use among populations served; perception of benefits vs. risks of these practices; any prior interaction with traditional practitioners and/or individuals using traditional medicine; and discussions or plans, if any, about referrals or collaborations with traditional practitioners. It should be noted that generally, individual refugees/migrants and THPs hide use and practice from aid workers as experience and stigma have led to or are perceived as potentially leading to negative repercussions.

Logistics. Interviews were held in English with paraphrased and summary interpretation conducted by Mahn Win, my translator and field assistant. Mahn Win spoke Burmese and multiple dialects of Karen, and trained in interview techniques with me during my master's fieldwork. He was therefore experienced in ethnographic case study research methods, as well as my specific research interests. I took

handwritten notes throughout the data collection process, and also recorded those interviews where consent was given by the interviewee. Recordings were not transcribed, but were used to augment notes during the data analysis process.

Direct observation

In addition to eliciting information via interviews and informal conversations, I also collected and synthesised information through the participant-observation. While attending the 14 meetings, I had the chance to watch participants as they performed the exercise of developing a comprehensive database of traditional Karen remedies, and the process they went through as they edited and published an herbal manual of traditional Karen medicine for border population use. I also had the opportunity to observe individual practitioners at work in the Mae Sot region, and to visit the monestary clinic, but was not able to access any of the refugee camp or IDP area clinics due to security concerns.

Second-hand ethnography

As access to refugee camps was not possible, my colleague Richard Berkfield, an educator with a Dutch educational NGO working in a number of the refugee camps, conducted "second hand ethnography" for me on traditional health networks within the camps. The ethnography performed by Berkfield included semi-structured interviews and informal observations, and generated additional data that informed my study. It should be noted that second-hand ethnography, as Porter (1994) has pointed out, is not without its limitations, and requires careful observation and close management of the researcher and his/her interaction with the study participants and setting. In conducting second hand ethnography in Newfoundland, Porter found, "Much of (my limited time in the field) was directed at 'training' the research

assistants, trying to get them to see the things I was seeing…. What I soon found I was doing was studying my own ethnographers. Only by understanding how they saw and heard the community could I 'interpret' 'their' 'data'" (1994, p. 75). During my time in the field with Richard, I observed his relationship with local populations, and tried to become familiar with his assumptions and unique biases towards traditional medicine and traditional practitioners within this context. This time spent allowed me to read and understand his interpretations with more insight and relative objectivity.

Indirect Data Collection

While in the field, I was able to access further data through document review and reports from work with approximately 116 Burmese (mostly Karen) practitioners, herbalists, health workers, trainees and interested or involved parties along the border region. Documents reviewed included: a) annual reports from herbal clinics in No Poe and Umpium refugee camps, b) database and herbal manual developed by THPs, c) GIFTS of Health background data: 2001-2003, d) traditional birth attendant training guides from IRC and TBBC, e) Karen Environmental and Social Action Networks (KESAN) documents, and f) education curriculum from ZOA, Denmark-based INGO.

Data Analysis

Data analysis was conducted using both ethnographic and grounded analysis methods. While software was used to manage my interview notes and facilitate the initial coding of the data that was gathered specifically my research questions. As part of this study's grounded approach, I used a two-phase coding process that encompasses open or initial coding first, and focused or selective coding second, in order to identify the variables and salient themes in my data. As Charmaz (2006) explains, this coding process entails asking the question of the data collected, "what is

this about? What is being referenced here?" (p. 2). This analysis process is specifically "concerned with identifying, naming, categorizing and describing phenomena found in the text" (Charmaz, p. 2). Below, I provide more detail in how this coding process unfolded within the parameters of my project.

Stage 1 Coding

In stage 1, I coded and analysed over 250 pages of fieldnotes and documents on traditional health resources. I used *Atlas-ti* software to help categorise this information into individual codes, coding themes and families. *Atlas-ti* is a software tool designed for managing and coding large bodies of qualitative data, including textual, graphic, audio and video data (http://www.atlasti.com). The three coding most salient coding themes and families included: (1) *Networks*, (2) *Refugee & IDP issues*; and (3) *Access*.

Networks is one of the main themes that I identified as part of the coding process and had the highest number of fieldnotes associated with it (227). *Networks* relates to all collaborative work between traditional health practitioners related to herbal clinics and training programmes, the development of the medicinal plants database and field manuals, and any dialogue related to building and expanding networks of traditional health practitioners. It also explores internal and external inputs that help develop and maintain these networks, such as local and overseas NGOs advocating for traditional health resources. This may include ways that traditional health practitioners are working with each other and with local and international NGOs to: facilitate network building; access plants and materials; pass on knowledge and train younger generations; and mobilise local and international work and interest in traditional medicine and refugees. These coding results are used

to describe how, where, if, when and *why* traditional health practitioners are working together along the border.

The *Refugee & IDP issues* code captures topics related to population health needs, and traditional health practitioners' attempts to address gaps in humanitarian care, as well as to meet community health and development needs. This code and topic had the next highest number of fieldnotes associated with it (136). This includes all discussions and issues related to how refugees and IDPs are affected by conflict, how they are living and coping in camps, their interest and/or involvement in traditional medicine and traditional health practitioner initiatives, their own traditional medical knowledge, and anything that describes the refugee and IDP population specifically. This code was used to paint a picture of populations served and how, why, and/or if they are involved and interested in traditional medical programmes and healthcare services.

The *Access* code identifies obstacles to practice and to health access for individuals, such as funding, security issues, access to plants/materials, and other challenges and barriers THPs face when trying to practice, work together, find funding, gather plant and medicine materials, and develop their networks. This code had the fewest fieldnotes associated with it (107). This code was used to describe the barriers THPs need to overcome in order to practice. In particular, it highlighted the areas that need to be addressed to help facilitate practice, networks and collaboration among different TRM actors in the region, and informed my summary and discussion of findings in Chapter VII.

The results from this coding and categorisation process provide an overview of and organisation to a very broad set of data sources, and form the basis for my data analysis and conclusions.

Stage 2 Coding

The second phase is known as selective or focused coding, which requires that a researcher consider all of the initial codes identified and build theory by "finding the driver that impels the story forward" (Charmaz, 2006, p. 4). This means that the researcher must identify and develop the most salient themes present in large groups of coded data, like the copious amount of data I gathered during this doctoral study. By narrowing down the codes to the most prominent categories in my batch of data, I was able to begin the theoretical integration process that accompanies data interpretation and the final step of drawing conclusions from that data.

Several themes emerged out of this coding process. The most prominent was *Burmese military dictatorship and resulting conflict*. This umbrella category encompassed the related code of *Increased ethnic division among minority populations* as one consequence of the Burmese military dictatorship. While other consequences also emerged as additional categories, the *Increased ethnic division* code was the most pertinent to my research and included the sub-category *Karen National Union Mission.* The sub-category *National Union Mission* included the objectives of protecting, serving, and strengthening the Karen self-determination movement (SDM). It was through the codes that emerged related to the KNU mission that the pattern that informs my theory and research results surfaced. These related codes include *Social Services*, *Infrastructure Development*, and *Traditional Karen Medical Systems*. It is the interrelationship between these categories that revealed

additional meanings behind traditional medicine that participants had voiced through their interviews with me. Out of the codes described above, I realised the importance of exploring the ways in which conflict and displacement can, depending on the level of organisation and strength of ethnic identity, strengthen and transform informal systems into more formal systems.

Validity, Role of the Researcher, and Research Bias

Validity. To ensure the validity of my research data, I conducted regular and final validity checks during the research process, relying specifically on descriptive and interpretive validity checking methods. Descriptive validity refers to the factual accuracy of the account as reported by the researcher. The use of triangulation, or multiple observers, allows cross-checking of observations to make sure the investigators agree about what took place (Maxwell, 1996). Interpretive validity refers to accurately portraying the meaning attached by participants to what I am studying. Participant feedback is the most important strategy, and is called "member checking" (Lincoln & Guba, 1985). In order to help ensure interpretive validity, I shared interpretations of participants' viewpoints with the participants and other members of the community regularly, and incorporated their responses into my documentation. Upon completion of my research, I shared these interpretations a final time, and made modifications, as warranted, based on the feedback I received.

Role of researcher. Research reflexivity is crucial throughout the data collection and analysis process, and is defined by Cassell, Bishop, Symon, Johnson, and Buehring (2009) as "critical appraisal of the researcher's taken for granted assumptions about their research and their own role within it" (p. 525).

Bias. Indeed, I approach this research with an inherent bias towards traditional, non-Western medicine as a valuable complement – and at times alternative – to Western biomedicine. These assumptions are part of my personal worldview, stemming both from my childhood using natural remedies in Montana, and my personal use and at times reliance on non-Western medicine for both myself and my family. These assumptions also evolved through my professional experience conducting clinical research on Traditional, Complementary and Alternative Medicine (TCAM) at Columbia University Medical School, and through my professional development training in Ayurveda. At the same time, my skills developed as a clinical researcher, and my experience witnessing both the positive and truly dangerous traditional practices used in the field in India and along the Thai-Burma border, have allowed me to develop a healthy skepticism and measured, scientific approach to TCAM. I expound on this further in a later section.

I am also deeply connected to refugee issues through my grandparents. My grandparents were Holocaust survivors, and upon arrival in the United States dedicated the remainder of their lives to assisting other refuges and families in need. My grandfather founded Colorado's Jewish Children and Family Services, and he and my grandmother proceeded to help resettle waves of Russian Jewish refugees throughout the 1970s.

Observing their resilience, and adopting their worldview that it is critical to focus on refugees' strengths rather than weaknesses, also contributes to my bias regarding refugee resiliency, reliance on networks, and refugees' desire to help themselves and their communities. My grandparents instilled in me the understanding that refugee populations are not vulnerable victims, but are people with their own pre-

existing knowledge and skills, and who, depending on the situation, have the capacity to care for themselves and their families. They believed, and witnessed through their lives and work, that when refugees are treated like victims they are at risk of adopting the role of victim.

Researcher bias also played out in my initial research questions and hypothesis development process. One of my initial three hypotheses in 2004 (Note: I later dropped the hypothesis format) focused on whether TRM resources exist and are serving refugee and migrant needs, but – due to my assumptions that collaboration with humanitarian agencies was valuable and desired – placed the relationship to humanitarian resources as a central focus. Hypothesis 3 (2004): *Partnerships between traditional health and humanitarian aid programmes along the Thai-Burma border may result in the delivery of more comprehensive healthcare to refugees, migrants and IDPs in this region.*

Through a critical analysis of my assumptions, and the reflective use of a grounded approach, it became evident that the relationship to humanitarian resources is secondary to THPs' efforts to revitalise and develop an indigenous resource in the face of external threats. The insight afforded by this approach allowed themes and connections to surface more organically out of the data I had collected. In particular, issues of national/ethnic identity, militarisation and endogenous development emerged more strongly, and it became clear that engaging humanitarian structures was not a central focus for all key informants.

In order to counteract a researcher's inherent biases, Hammersley (1992) proposes researchers take the following actions: avoid over rapport with organisation

members; treat the setting as anthropologically strange; retain balance between insider and outsider; and retain social and intellectual distance to preserve analytical space.

Throughout my research process, and with the support of triangulation and the use of a revised Grounded Theory approach, I remained aware of these biases and attempted to question, create distance, conduct validity checks, and triangulate my data and assumptions to maintain a balanced perspective and approach. It is never possible to fully separate oneself from one's worldview and assumptions, but self-awareness helps reduce some of the overt biases.

Potential Limitations

While every effort has been made to ensure the validity and reliability of this study, there are several potential limitations that must be considered. These limitations include, but are not limited to:

1. Informant bias: Several types of informant bias were possible in the interviews I conducted. One type of bias may stem from the fact that TRM and the Karen SDM are very politicised issues that some may associate with a certain level of danger or risk for the well-being of themselves, their family, or their community. This perception of risk is compounded by the fact that many of my informants were refugees or forced migrants who already feared persecution. Informants who feel a sense of fear or risk may, therefore, be biased in their responses. This type of informant bias was addressed through informed consent procedures and an emphasis on nondisclosure and anonymity throughout the data collection process. Once informants realised that their identity would not be revealed as part of the

research, they demonstrated a higher comfort level during their participation in the interviews.

Another common form of bias is related to the Hawthorne Effect. This is seen when informants formulate their response based on their perception or assumption about what a researcher wants to hear, which may differ from their honest response to that question. In order to minimise the interference of the Hawthorne Effect, it was made clear to informants prior to interviews that the purpose of the study was solely to gather information and there were no correct answers to any questions. This effect was also avoided by employing a semi-structured approach to interviews, which removed a more hierarchical interviewer-interviewee structure and restored agency to the informant in their ability to direct the conversation based on their comfort levels.

2. Researcher bias: The main form of researcher bias stems from a researcher imposing his or her preconceived notions and expectations for a study onto their research process instead of letting the data *inform* their understanding of the research topic and circumstances. This issue was addressed to some extent above. However, by including it as a potential limitation, I acknowledge the central significance of avoiding researcher bias to the success of my doctoral study. While I recognise that I possessed a certain level of researcher bias when I first began this study, I have become more critical and conscious of my role by adopting a revised GT approach stemming from reflexivity. This approach has enabled me to more consciously overcome previous values and assumptions I may have had

about TRM and Burmese refugee groups, and instead allow the data and my interaction with the participants inform my analysis of that data.

3. Sampling: As was noted earlier in this chapter, there are certain drawbacks to nonprobability sampling methods. One of the drawbacks associated specifically with snowball sampling stems from the possibility that the network of informants from which participants are drawn through snowball sampling will miss certain "isolates." This generally occurs when an informant network is not broad enough or when there exist certain barriers preventing the researcher from contacting certain informants. This was particularly the case with my study due to the fraught political tensions along the Thai-Burma border and the difficulty that I had gaining entrance to refugee camps. I was not able to visit refugee camps for interviews due to security and legal concerns. It is very difficult and in many cases impossible to gain official permission to enter refugee camps, which made it generally prohibitive for my field assistant and myself, specifically because my assistant was a Burmese migrant himself. Due to my inability to travel to and enter all areas of relevance to my research topic, I inevitably missed certain opportunities to engage with additional informants in those areas. However, I attempted to minimise these limitations by continually forming new relationships with additional informants and thus expanding my informant network to encompass an even broader community.
4. Generalisability: As is the case with any research study like this one, which has a very focused sample population and setting, the research

findings will not necessarily be generalisable to a larger population. However, the main purpose of this study is to contribute additional research specifically regarding displaced populations' use of TRM, and it does share similarities to cases such as those in Nicaragua and Vietnam mentioned elsewhere in this dissertation. Given that this is the primary purpose and significance of the study, concerns over generalisability to broader populations are not considered critical.

Ethical Considerations of Research Involving Human Participants

The very personal, interactive nature of ethnographic research, in particular within risk populations such as refugees and migrants, highlights the basic ethical considerations (Patton, 1990) of confidentiality, informed consent, risk assessment, public health considerations, and participant compensation.

Several factors, including my previous research experience and my formal training in ethical research issues, adequately prepared me to address the ethical considerations at play in this study. My previous experience comes from my work as a research assistant at Columbia University Medical School's Center for Complementary and Alternative Medicine (New York) from 2001 through 2002. The research was an NIH-funded clinical trial titled "Effects of Chinese Macrobiotic Diet and Lifestyle Changes on Menopausal Health." Prior to beginning this work, I completed the university's certification course in Good Clinical Practice: "Protection of Human Participants in Biomedical and Behavioral Research." I am therefore certified in working with human subjects. I further refreshed this training through my completion of the QEH ethics requirement procedures prior to beginning this doctoral research. In the following sections, I describe the steps that were taken to ensure that

the relevant ethical considerations were addressed satisfactorily during the course of my research.

Confidentiality

Refugees like those along the Thai-Burma border are often fleeing dangerous political situations. As such, disclosure of personal information may put refugees at risk of persecution by their country or government of origin, as well as by fighting factions within exile. Burmese refugees, though currently protected by UNHCR, are under constant threat of repatriation. Burmese migrants face an even graver risk of persecution by both Thai and Burmese authorities, as well as persecution upon repatriation (Refugees International, 2004).[28] Considering these circumstances, and the fact that many of the refugee respondents I worked with shared very personal information about flight and current displacement issues as part of this study, I guaranteed all participants full nondisclosure, and I asked for no identifying information other than general demographic characteristics. No names or personal details have been included in data collection, analysis, conclusions or articles for publication. All written data used pseudonyms and was kept in a secure location, and digital data was locked on my personal (not shared) computer, which remained with me or secure at all times. See intellectual property rights section for related confidentiality issues.

[28] According to a Refugees International 2004 report, Burmese deportees are handed over by Thailand's Ministry of Interior to the SPDC. "Unauthorized departures from Burma are punishable by a two-year prison sentence and heavy fines. Any Burmese, believed to be a 'resistance soldier or supporter,' or a political dissident, can expect and will probably receive harsh treatment. Returnees often are met by armed militia factions, or local officials seeking 'volunteers' for forced labor or military service, or by those seeking to extort money from refugees desperately trying to return to Thailand" (Refugees International, 2004).

Informed Consent

My research was formally processed and approved under the Queen Elizabeth House (QEH) Ethical Guidelines for Good Research Practice guidelines prior to the start of data collection. According to these guidelines, informed consent requires "truthful and respectful exchanges between social researchers and the people whom they study" (http://qeh.ox.ac.uk/pdf/study/dphil-course-guide). Through discussions with participants and use of a QEH-approved consent form, translated into Burmese, Karen (and Karenni when necessary), I communicated to all research participants: 1) the purpose of my study, 2) the expected outcomes, 3) the anticipated uses of the data, 4) the potential benefits as well as harm of the study, 5) assurance of data storage and security, and 6) issues of anonymity and confidentiality. As I was working with refugees and migrants in very vulnerable situations, anonymity was taken with utmost seriousness and only first names or pseudonyms were used for all participants. All respondents, after being informed of potential risks and benefits, either signed or gave verbal consent to a form agreeing to participate. Children were not involved in the study.

QEH also notes, "Consent in research is a process… and may require renegotiation over time" (QEH Ethical Guidelines, 2004, p. 4). I therefore requested consent upon every meeting, during the transcription and data analysis process, and before submitting my dissertation. Moreover, I will make sure to request consent in the future prior to publishing any written matter. Per university guidelines, I submitted my informed consent procedures and forms to Queen Elizabeth House Ethics Committee for review upon transfer of status, and underwent the related human subjects review process prior to engaging in research with human subjects.

Risk Assessment

It has been documented that refugees who participate in open-ended interviews may experience psychological stress related to trauma experienced during flight. As is standard practice in human subject research, respondents were asked to stop the interview if they felt uncomfortable at any time. Prior to engaging with study participants in any form of ethnographic research, I ran pilot interviews with my field assistant Mahn Win, as well as several key informants with whom I had already established rapport. This process helped me confirm the appropriateness and cultural sensitivity of my interview guides.

Public Health Considerations

This research involved interaction with traditional health practices and medicines that have not undergone clinical (biomedical) safety evaluations. Though I did not aim to engage in any form of health advisement, I did use my background in forced migration and health (MPH) to make information available regarding serious conditions such as malaria, acute respiratory conditions and HIV/AIDS when appropriate. That said, I am conscientious of the paternalism inherent in the biomedical-traditional relationship worldwide (as discussed earlier), and I have therefore respected the boundaries between my role as ethnographer and observer and the already established processes and protocols in place within TRM networks. Moreover, I respect that although safety studies and clinical evaluation are needed for treatments of serious, highly infectious diseases, the wider range of traditional health practices may include trusted remedies for more common conditions, such as certain skin diseases and gastric conditions, and I never interfered with or undermined those remedies. I recognise the fact that these treatments may be more culturally familiar,

accessible, affordable, and even more effective for certain illnesses, in particular those which are culturally-based.

Participant Compensation

I did not offer individual compensation to interview participants, but throughout the study period, made donations to various community health organisations and traditional health projects that serve Burmese refugees and migrants. In particular, I supported the production of (IPR-protected) field manuals on safe and effective use of common medicinal plants. These manuals, created in collaboration with GIFTS, KESAN, KDHW and local traditional practitioners, were printed in 2008 as soft-cover manuals and have been distributed among health workers, families and traditional practitioners throughout the Thai-Burma border region.

Intellectual Property Rights and Indigenous Knowledge

I acknowledge the vulnerable nature of indigenous communities' knowledge systems to appropriation or stealing from outside individuals and actors. I have thus made every effort possible to respect and protect the intellectual property rights of the participants in this study and the knowledge they shared as part of my ethnographic work. Principle 5 of the Indigenous People's Caucus statement, presented at the World Intellectual Property Organisation's 1999 "Roundtable on Intellectual Property and Traditional Knowledge," calls for assurance that the ownership and custody of indigenous peoples' heritage be collective, permanent and inalienable, as prescribed by the customs, rules and practices of each people (Tauli-Corpuz, 1999). These assurances have been under negotiation by world intellectual property bodies for nearly two decades now.

In March 2004, the World Intellectual Property Organisation's (WIPO) Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (IGC) met to expedite the adoption of international protection efforts for the safeguard of traditional knowledge systems by all state parties (Gibson, 2004). Although some states have yet to commit to this agreement, it is up to researchers evaluating traditional medicines to recognise that under international law, the customary owner, and often that owner's country of origin, holds rights over the knowledge being evaluated (Bodeker, 2003).

Consequently, in order to protect the intellectual property rights of customary knowledge holders, the medicinal plants and methods of preparation included in the field manuals referenced above have not been used or referenced in any other publications, and remain under the sole ownership of the Burmese refugee community.

CHAPTER IV: SETTING THE STAGE: HISTORY OF ETHNICITY AND TRADITIONAL MEDICINE IN BURMA

This study situates Karen ethnic and cultural resources within the aid and development context along the Thai-Burma border. In order to understand the complex dynamics of this region, I will present a condensed overview of the colonial and development legacies that have influenced the non-Western world, relating these legacies to the specific case of Burma. This historical background establishes the context within which the current research study was conducted, and will inform my presentation of study findings in Chapters V and VI.

In this section, I examine the colonial legacy in Burma, provide background information on the Burmese conflict, and review the impact that these political forces have on local and regional medical systems.

"Any consideration of development theories and practices needs to include a discussion of the importance and nature of colonialism" (Willis, 2011, p. 18). It is important to acknowledge that current day development practice is rooted in Europe's colonial past, despite the fact that there were very few colonies left worldwide by the beginning of the twenty-first century. There are conflicting perspectives on the present day role of development and whether it functions to mitigate and repair the damages of colonialism, or whether it actually reinforces the very disparities that colonialism created. The situation is much more complex, however, than the binary between "global" versus "local," or "North" versus "South" development models. This study strives to complicate these binaries and explore the possibility of a collaborative approach to development that breaks with these dualities. I accomplish this through an in-depth exploration of the relationship between international

development projects and Burmese self-determination movements along the Thai-Burma border.

The Case of Burma: Ethnic Diversity and Precolonial History

Burma is one of the most ecologically, ethnically and linguistically diverse regions in Southeast Asia – and the world (Matthews, 2001; Paolillo, Pimienta, & Prado, 2005; Conservation International, 2007). Nestled between Thailand, China, Tibet, Bangladesh, and India, the country's estimated 55 million residents (as of July 2013) belong to over 100 ethnic groups (CIA World Factbook, 2014; Narang, n.d.; Burma Project, 2006; Matthews, 2001). The Burman people are the dominant ethnic group in the country, making up 68% of the total population. The six largest ethnic minority groups include the Shan (9%), Karen (7%), Rakhine (4%), Chinese (3%), Indian (2%), and Mon (2%), with an additional 5% belonging to other ethnic groups (CIA World Factbook, 2014). Buddhism remains the dominant religious belief system, with 89% identifying as Buddhists, 4% as Christian – Baptist or Roman Catholic –, 4% as Muslim, 1% as Animist, and the remaining 2% of the population practicing a different religion (CIA World Factbook, 2014). The following map (Figure 5) demonstrates the ethnic and regional diversity of the Burmese region.

Since the establishment of the first Pagan Dynasty in the eleventh century AD, the various ethnic minority groups have co-existed in Burma under different versions of the patron-client system, claiming loyalties to regional authorities as they struggled against one another and other regional powers (Siamese, Chinese, Mongolian) to co-exist. Burma was loosely joined as a territory, but all leaders struggled with the same principal challenge of pacifying and unifying the various ethnic groups in this geographically, culturally and linguistically diverse land.

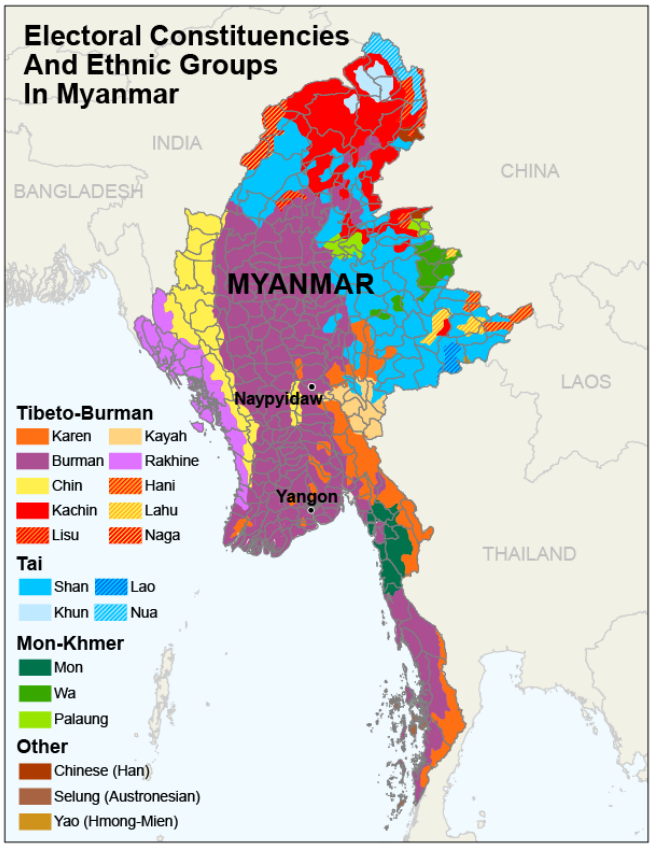

Figure 5. Electoral constituencies and ethnic groups in Myanmar.

Burma was first colonised by Britain in 1886 following three Anglo-Burmese Wars (1824-1885), and governed as a province of India through 1937. Initial resistance to Britain's possession of Burmese territory lasted into 1890, concentrated in the northern region, including the Karen state area. Burmese resistance was met by brutal suppression, including the complete destruction of entire villages, and often led to intensified, absolute rule by colonial powers (Smith, 1997). The British brought in Anglo officials to govern these rebellion-prone provinces to ensure that the colonisers' military and economic system was deeply engrained in Burmese society.

Under British rule, ethnic divisions were sharpened through the development of a two-tier administration system that divided "Ministerial Burma" (central Burma), from the "Frontier Areas," which were the border areas dominated by ethnic minority

groups. Throughout the "Frontier Lands," ethnic groups maintained fairly autonomous trade and self-rule zones. British colonial powers negotiated separate tax and governing laws within these areas, perpetuating the rifts in ethnic or group identity, particularly between mainland, "majority" Burmans and border populations. For example, the British developed a separate administration for the Kachin and the Chin in 1895 through the Kachin Hill Tribes Regulation and the Chin Hills Regulation, granting these groups greater autonomy than the majority Burman (Ganesan & Hlaing, 2007). This and Britain's agreements with other tribes in Burma deepened ethnic divides and set minority groups on a separate and uneven path towards social, political and economic development (Callahan, 2009; Smith, 1997).[29]

Burma's economy began to grow quickly as a result of the economic restructuring enforced by British colonial powers, yet the local Burmese community remained oppressed and impoverished (Ganesan & Hlaing, 2007). Unrest continued throughout the period of British rule, with tensions flaring in the 1920s and 1930s, resulting in multiple uprisings led by students, workers and Buddhist monks. Britain's decision to separate Burma from India in 1937 was viewed by many Burmese as an attempt to distance Burma from the burgeoning Indian independence movement. Shortly thereafter, WWII began, with Japan occupying Burma from 1942 through 1945.

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29 Similar "divide and conquer" tactics were employed by colonial powers worldwide, with parallel destructive effects that reinforced tensions between different ethnic groups and social classes. These tactics included installing proxy or direct rule authorities to impose and enforce colonial agents and systems; granting disproportionate authority to local elites, which deepened their class alliances with colonials; and setting up native administrations that corresponded to specific ethnic groups or tribes. These strategies ensured that the colonisers maintained and built control over local peoples and resources, and eventually influenced which groups remained in power as post-independence rulers and ruling parties.

The involvement of different factions of Burmese ethnic groups polarised the already tense internal relations in Burma, as many ethnic minority groups aligned with the British, while the Burmese majority fought with Japan. In particular, the Karen, Kachin and Chin joined British ranks to fight against the Japanese. Burma's national liberation movement, on the other hand, spearheaded by Burman leader Aung San, fought alongside the Japanese against the British and their Burmese minority opponents.

Burmese independence came in 1948 on the heels of WWII. As the new Union of Burma was being formed, the Burman-led government made overtures to reconciliation, promising ethnic minorities full federal rights and a path towards autonomy.[30] But these efforts came too late, and following Aung San's assassination and the rapid British exit from Burma in 1947, the Karen National Union (KNU) and several other ethnic minority parties began boycotting the political process. Civil war followed quickly, with nationality parties already boycotting the political process. It became clear during this period that ethnic division, reinforced by colonial intervention, would have a lasting effect.

Overview of Burma's Postcolonial Conflict

In 1962, after just over a decade of promising political moves in the direction of democratisation, Burma's first and only constitutional government was overthrown by a despotic military dictatorship, the State Law Order Restoration Council (SLORC). SLORC, known as the State Peace and Development Council (SPDC) from 1997-2011, continued to systematically and violently oppress dissent among Burma's

30 After U Nu, a Burman, was elected as prime minister, Sao Shwe Thaike, a Shan, and Smith Dun, a Karen, were appointed as president and army chief-of-staff respectively.

majority as well as its ethnic minority populations. These sustained internal clashes between the Burmese government and different minority groups drew out into the world's longest civil conflict.

During the time of this research (2003-2011), instability and violence was a regular reality in Karen state. Figures 6 and 7 show the devastation of an IDP camp after being attacked by the SPDC.

Figure 6. Mae Hla Poh Hta Internally Displaced People's (IDP) camp before and after SPDC invasion in 2000. From Dang Ngo.

The original caption for Figure 6 reads: "The Karen people, living in the east mountains of Burma, have been brutally abused by the SPDC. This is Mae Hla Poh Hta Internally Displaced People's (IDP) camp. This particular camp, despite receiving little aid, was the model village for IDPs. It was located on the border of Burma and Thailand, so people could escape across when the SPDC invade" (Dang Ngo, n.d.).

Figure 7. Mae Hla Poh Hta camp after SPDC raid. From Dang Ngo.

The original caption for Figure 7 reads: "In April 2000, the SPDC raided and burnt Mae Hla Poh Hta to the ground" (Dang Ngo, n.d.).

Although Burma began a transition to democracy in 2011, as of March 2010, the *United Nations Special Rapporteur* reported on Myanmar, "there is a pattern of *gross and systematic violation* of human rights which has been in place for many years and still continues" (emphasis added, Ojea Quintana, 2010). Other sources report, moreover, that human rights violations have persisted in recent years throughout this period of transition (Perlez, 2014; Paluch, 2014).

Despite decades of international political pressure and sanctions, Burma remained largely isolated and unreceptive to outside pressures from the United States and international institutions like the United Nations. Following the widely publicised student uprisings and murder of over one thousand student protesters in 1988, SLORC conducted a general election in 1990. The election was overwhelmingly won by Aung San Suu Kyi's National League for Democracy (NLD), and Aung San Suu Kyi was immediately placed under house arrest. The release of Suu Kyi shortly before national elections in November 2010, after 20 years under house arrest, brought wide

international praise, and led to a slow and steady transition to democracy. Although steady progress towards democracy has been made since, statements issued by the Shan Human Rights Foundation and other local organisations report that military attacks continued in 2011 (Associated Press, 2011). Moreover, Burmese authorities have continued to carry out human rights violations, including rape, torture, and withholding of medical care and social services in recent years (Physicians for Human Rights, 2011, 2012; Footer et al., 2014). State military attacks on Burmese ethnic minority populations have resurged as recently as April 2014, sending thousands more fleeing into Thailand for refuge (Paluch, 2014).

Following Burma's transition to democracy in 2011, in January 2012, after more than 60 years of armed conflict, the main democratic party of the Karen – the Karen National Union (KNU) – signed a ceasefire agreement with the Burmese government. However, there have since been some breaches of the ceasefire (Oxford Burma Alliance, n.d.), and it has yet to yield many concrete developments.

When SLORC seized full government (military) control in 1962, a top priority was to establish complete authority over all of Burma, including the Frontier Lands that had been favoured under colonial rule. Ethnic minority groups along the border reacted by disputing the legitimacy of this new government, and quickly armed themselves to fight for autonomy. Minority authorities began this fight with fairly good odds, strengthened by their favoured position under British powers, supported by flourishing cross-border trade, and benefitting from Thai policy that legitimised Karen and other border regions as valuable "buffer zones" against an increasingly hostile Burmese regime. These dynamics allowed the Thai-Burma border to remain predominately under the control of Shan, Karenni, Karen and Mon indigenous ethnic

minorities as these groups established de facto autonomous states throughout the region. Throughout the 1960s and 1970s, these minorities groups joined forces in fighting and holding the junta back.

With the help of improved artillery and growing familiarity with jungle terrain, the military junta greatly intensified its offensives in the early 1980s and one by one ethnic minority strongholds were broken. Part of the junta's tactics included divide and conquer methods of pitting different ethnic groups against each other through varied and conflicting ceasefire deals that intentionally spurred previously allied ethnic minorities into fighting one another. The Burmese regime's divisive tactics closely mirrored the strategies employed by colonial forces decades earlier. From 1984 to 1994 the Burmese military launched its most intense offensives, sending nearly 80,000 refugees fleeing into Thailand (Thailand Burmese Border Consortium, TBBC, 2004).

Through these decades of fighting, all Burmese ethnic minority groups suffered significant losses and population displacement, with the Karen people among the most affected (South, 2007a).[31] As of 2013, approximately 415,000 Burmese refugees and migrants sought shelter in Thailand and other neighboring countries, and approximately 632,000 people were internally displaced within Burma (CIA World Factbook, 2014). Of the Burmese refugees in Thailand, at least 140,000 are Karen living in camps along the Thai-Burma border (CIA World Factbook, 2014). Despite promising progress towards democracy and decreased fighting in recent years, as of

31 Although at least 18 ceasefires have been signed since 1989, few have led to improved health, security and welfare outcomes in these regions. The Karen National Union began ceasefire talks in 2004, but according to Ashley South, "developments since mid 2005 indicate that the government lacks the political will to make peace… between February 2006 and January 2007, approximately 25,000 people were displaced by (military junta) attacks on villages in North-western Karen State" (2007a, p. 13). It remains to be seen what the long-term effects of the KNU's 2012 ceasefire with the new government will be.

2013, more than 2.5 million Burmese people remained either internally displaced, stateless, or had fled Burma seeking refugee or asylum status (UNHCR, 2013).

The emergence of ethnic minority self-determination movements in Burma can be seen partly as an attempt to unite people over a common culture, and partly as a drive to achieve cultural autonomy (Stewart, 2003). While historically, some ethnic or cultural distinctions in different colonised areas have been invented or conflated by colonial powers,[32] the specific ethnic divisions among Burmese minority groups have persisted since well before the entrance of colonisers in Burma, as was discussed earlier. Just as some colonisers have used cultural identity to achieve specific political or economic ends, so do certain self-determination movements, who see ethnic or cultural commonalities as "a powerful way of binding people together to act collectively for particular purposes" (Stewart, 2003, p. 3). This view of ethnicity and its manipulation by different forces is known as the "instrumentalist" perspective on ethnicity (Banks, 1996). There is a growing body of work that critiques the classic view of dominant oppressor against powerless oppressed, and authors including South (2007a, 2007b) and U. Kyaw Myint (2003, 2009) view ethnic minority militias as partially, although not predominately, responsible for the protracted nature of the conflict in Southeast Asia. These critics encouraged increased cooperation by minority authorities, and believed that Burma would only realise a transition after all groups laid down arms (South, 2007a). While Burma has now entered the free market,

32 This is especially the case in certain areas of Africa. "Modern Central Africa tribes are not so much survivals from a pre-colonial past but rather colonial creations by colonial officers and African intellectuals" (Ranger, 1983, p. 248). For example, the distinction between Hutus and Tutsis – upon which the infamous Rwandan Genocide was primarily based – was largely invented by colonial powers for administrative convenience.

there has yet to be a successful national ceasefire implemented throughout the country and hence, many of these researchers' concerns remain valid.

Burma continues to be a place of competing powers and contested identities. As of 2014, the official government, as well as the diverse ethnic minority groups in the region, continue to struggle against competing internal and external pressures, including colonial legacies, foreign economic interests – primarily from the US and China – and the interventionist strategies of international aid and development actors. Most salient for this study, however, are the persisting ethnic and cultural tensions in the Thai-Burma border region.

Interface Between Western and Non-Western Medicine in Colonial and Development Contexts

> Regardless of the society, biomedicine attempts to control the production of health care specialists, define their knowledge base, dominate the medical division of labor, eliminate or narrowly restrict the practices of alternative practitioners, and deny laypeople and alternative healers access to medical technology. (Baer, 1997, p. 215)

Medicine and health systems are a main focus on this study, and have been and continue to be directly impacted by colonial forces and development interventions. This section briefly reviews the intersection between local and global forces that have impacted health systems across the globe, with a focus on Burma, to demonstrate another angle from which to view colonial legacies. For the purposes of this study, I will examine how the introduction of European medical theories and technologies – known as allopathic, conventional or biomedical medicine – changed the medical landscape permanently in colonial South Asia. Of particular interest is the

evolution of the Ayurveda medical system, which traces its origins to the Atharve-Veda texts of 1000 BCE, since Burmese traditional medicine is partially based in Buddhist and Ayurvedic medicine from India, though it is also influenced by animism and local indigenous traditions (Neumann, 2003a, 2003b; Bodeker & Neumann, 2012; Kyaw Myint, 2003). These changes evolved through three principal phases beginning in the colonial period: 1) Europe's early trade and exchange with foreign cultures; 2) the consolidation of colonisers' power through repressive tactics; and 3) the expansion of colonial health care systems within the new colonies. As a result of these increasingly oppressive phases, in many colonised areas indigenous medical traditions were either completely lost or driven underground until opportunities for revitalisation arose as part of independence movements.

In the early years of exploration and trade with the Indian subcontinent, European explorers recognised, traded in and even relied on certain medicines found in Ayurveda and Unani medicine to help them treat illnesses – both at home and while overseas.[33]

Indeed, until about 1800, British traders and colonial powers were reported as having valued Indian medicine at an equal or higher level than European remedies, and were eager to find cheap and effective local medicines for a range of illnesses, including endemic diseases such as malaria (Harrison & Pati, 2009, p. 9). This positive and open approach to Indian medicine was reinforced by British Orientalists and, as seen through the story of Dr. MacDonald in the opening chapter, resulted in systematic efforts by select European scholars in the late eighteenth and early

33 This opportunistic use of medicine was not a new phenomenon. Early Greek medical texts cited Indian medical plants as part of its compendia, and shared humoral system theories with both Unani and Ayurveda. These ancient forms of knowledge and medical exchange demonstrate the fluid nature of early health knowledge (Harrison & Pati, 2009, p. 10).

nineteenth century to study and promote Ayurveda (Harrison & Pati, 2009; Taylor, 2007). As imperial and colonial powers took root during the Age of Imperialism and gained in political and military power and influence in occupied areas, the "exchange" dynamic shifted to one of colonial authorities' dominance over all social and political systems.[34]

Medicine quickly became a "tool of empire," employed to civilise the natives as well as to sterilise environments hostile to the health of both colonisers and colonised (Arnold, 1988). During this era, Western medicine focused mainly on making new lands habitable for colonial settlers, missionaries and militaries. Major health concerns in most colonies included water and sanitation, the control of infectious diseases (bacterial, parasitic, and viral), vaccination procedures, nutrition, maternal and antenatal care, and infant and child health. During this period, "curative health facilities in major urban centers [remained] the main colonial health projects" (Baer, Singer, & Susser, 1997, p. 210). Early technologies, combined with the move towards urban hospital treatment centers, allowed European biomedicine to impress and begin to permeate local cultures even further. The advent of Western germ theory, early surgeries and the development of anatomy, and the field of Tropical Medicine[35] helped European powers cast biomedicine as modern, enlightened, and more effective than local systems.

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34 The colonial period coincided with the shifts taking place through the Scientific Revolution, Renaissance and Enlightenment in Europe (and its ripple effects in the Americas). Despite the long history and valuable practices of non-Western medicine, European powers, emboldened by Positivism and Reason, found more ways to rationalise their dominance, and bring with it a sense of superiority and "civilization" in the ways they controlled the peoples and cultures they were occupying.

35 In 1899, Joseph Chamberlain, the British Sec. of State for Colonies, promoted the establishment of medical schools in London and Liverpool as the study of tropical disease was viewed as instrumental in promoting Imperial policies. Other schools of tropical medicine were established in Amsterdam, Paris and Brussels (Baer et al., 1997, p. 210).

The increased esteem of the scientific and health fields in general was apparent in the perception among local elites in the colonies. The June 22, 1839 issue of *Quest for Knowledge* (an Indian publication) included a report about the establishment of a Medical College and related hospitals that would hold: "80 beds, efficient physicians having their training in anatomical dissection, and marvelous outcome of 'English treatment' as opposed to dangerous local practices" (Bhattacharya, 2009, p. 9).

European beliefs about the superiority of Western medicine were concretised by exclusionary policies and drastic regulations. Indigenous medicine and practice was outlawed or regulated in many colonies, compromising established institutions and driving many practitioners further underground. For example, in 1835 the British colonial government outlawed the teaching of Ayurveda at the Calcutta Medical College (Taylor, 2007), and in 1935 and 1940 in Vietnam, locally produced indigenous medicines were declared poison by the French colonial authorities (Thompson, 2003).

With European expansion, biomedicine came to supercede in prestige and influence even professionalised medical systems within colonised cultures – such as Ayurveda and Unani in India, and Chinese traditional medicine (Baer et al., 1997, p. 212).

Despite biomedical dominance and often harsh regulations, the reality of health care delivery – especially in rural areas – continued to take on a fairly pluralistic format. Colonial health care systems typically included an array of clinics, hospitals, and rural dispensaries as well as medical care provided by missionaries,

local individuals who received some Western (primary or public health care) training, and indigenous healers and medicines (Ember & Ember, 2004, p. 186).

In the case of Burma, much traditional indigenous medical knowledge was permanently lost as a result of British colonisation, and during the decades of civil conflict that followed. "Dissemination and institutionalization of western medicine by colonial researchers, missionaries, educators and policy-makers in Burma correlated to generally ethnocentric perceptions with European presumptions about indigenous medicine" that followed widespread trends of suppressing and strictly regulating traditional medical care (Edwards, 2010, p. 21). There were some attempts at medical pluralism during this period, but they were largely unsuccessful. One such instance was Taw Sein Ko's (who later became Assistant Secretary to the Government of Burma) advocacy in the late 1800s for incorporating traditional indigenous medical practices and treatments into the curriculum for Burma's medical education system. Unfortunately, these efforts were rejected by colonial authorities (Edwards, 2010).

Despite its formal suppression, traditional Burmese medicine remained at least partially intact throughout the colonial period. As uprisings against British rule increased within Burma in the 1920s and 30s, colonial authorities attempted to appease the Burmese people through the integration of indigenous medical practices into formal education systems, appointing a governmental committee for that express purpose (Aung-Thwin, 2010). Following independence, traditional indigenous medical systems became part of the nationalist, and later isolationist, policies of the Burmese regime. The Burmese regime's concerted efforts to formalise its traditional medicine system began in 1953, shortly after independence from British and Japanese colonial forces, with the Indigenous Myanmar Medical Practitioners Board Act in

1953, amended in 1955, 1962, 1987 (Kyaw Myint, 2003). The revival and manipulation of traditional health systems in Burma is explored in detail in this study.

Echoes of Colonial Medicine: International Development and Humanitarian Aid

With the phasing out of colonial rule and the establishment of the WHO at the end of WWII, international health campaigns began looking for success stories, aiming to improve local health conditions rather than just sterilising the land for the safety of colonial transplants. This new international health focus on "humanitarian aid," particularly in relation to acute refugee situations, has resulted in the rapid emergence and professionalisation of numerous humanitarian aid organisations and programmes. This can specifically be seen in Thailand, where there has been a flood of more than one hundred refugee aid organisations working in the border area.

The disengaged campaign mentality of many humanitarian aid interventions echoes the colonial medicine approach, and risks perpetuating the power dynamics outlined above. In particular, many humanitarian interventions are documented as reinforcing the division of "Western scientific" vs. "local folk" medicine and the value judgments inherent therein.

According to Stacy Pigg (1995b), a medical anthropologist who was involved in health and development projects and research in Nepal for over a decade, international humanitarian aid interventions engage with local practitioners with the sole concern of, "identifying the potential compatibility or incompatibility between what they call 'beliefs and practices' and health development objectives" (p. 20). This exacerbates the binary by framing medical pluralism only in terms of "competition or possible collaboration; e.g., Do traditional practices interfere with our objectives? Can we train traditional medical practitioners?" (Pigg, 1995b, p. 20).

As noted by Baer et al. (1997), this rigid opposition of "modern" versus "traditional" medicine may not be necessary or most productive. The potential for more fluid, collaborative alliances in regional health care was one of the areas of focus of this study.

This review of the history of ethnicity, conflict, colonial influence and medicine in Burma set the stage for the current day context within which this study was conducted. The following chapters, V, VI, and VII present the results of this study.

CHAPTER V: KAREN MEDICAL NEEDS, AVAILABILITY OF CARE, AND TRADITIONAL MEDICAL BELIEF SYSTEMS

This chapter provides an overview of the larger context in which the Karen medical system eventually evolved (covered in Chapter VI). Below I provide: (a) a description of the medical needs that the Karen faced during my fieldwork; (b) a brief description of the western and traditional medical practices available to them; (c) a summary of how the Karen traditional medical system fits within the larger Ayurveda and Burmese medical traditions; (d) a more detailed account of the Karen traditional medical belief system itself; and (e) a brief overview of what the Karen population knew about traditional medicine and how they used it in 2002 and 2007 (prior to and during my fieldwork period).

What are the Medical Needs of the Karen?

The general population base encompassed by this research included approximately 140,000 predominately Karen[36] refugees and a percentage of the Karen Internally Displaced People (IDPs) along the border. Patients/recipients included: migrants and IDPs who had no access to healthcare; refugees in camps who wished to continue prior use of traditional medicine; refugee/IDP patients who had tried Western medicine or humanitarian care and wished to begin or return to traditional medicine; and community members interested in learning skills for self- and community-care.

Burmese refugees, migrants and IDPs suffered from acute health care needs relating to communicable disease, respiratory infections and malnutrition. According to health experts, malaria, tuberculosis, hepatitis B and reproductive health issues led

36 Karenni, Shan, Mon and Pa-O minority populations are also living in camps and Karen State IDP areas, but the majority population, and main focus of this study, is Karen.

as the most pressing needs. Malaria, including *Plasmodium falciparum*, was endemic to Thai-Burma border region. The at-risk population within the Tak Province totaled over 450,000 with malaria mortality accounting for 15% of all deaths in the refugee camps in early 1990s. In recent years, with use artesunate-mefloquine combination therapy (MAS), *P. falciparum* malaria cases have fallen by 34%. Although its exact prevalence was unknown, hepatitis B was also reported as one of the most pressing and under-diagnosed and treated conditions along border. Likewise, parasites – particularly roundworm, hookworm, filariasis, flukes, amoeba and Gioardia) – were also highly prevalent among refugees (Shanks et al., 1990; Nosten et al., 1991; Allden et al., 1996).

Other serious chronic concerns included HIV, dengue fever, Japanese encephalitis, leprosy, psychosocial trauma and a range of more common health conditions (Petersen et al., 1998; Cho-Min-Naing, 2000; Okada et al., 2000; Kemp & Rasbridge, 2004; McGready, 2001; Banjong et al., 2003; Kemmer et al., 2003). For example, at the time of my research, 42.6% of children under five living in refugee camps suffered from chronic malnutrition (WHO Thailand, 2004). There were approximately 85,000 cases of tuberculosis reported along the border and 13% to 14% of all new cases were HIV co-infected and 2% to 7% of all cases were identified as multi-drug resistant (MDR) strains. Despite a lack of HIV surveillance in Burma or Thailand at the time of this research, WHO (2000) estimated that there were 530,000 to one million persons currently infected, with high rates of cross-border spread. Although the Burmese military government claimed to eradicate Hansen's disease (leprosy) in 2003, border reports indicated continued transmission and significant disability rates. Finally, up 8% of refugees surveyed experienced violence, death,

kidnapping and rape personally or among family and friends (WHO Thailand Border Health Program, 2004).

These serious health conditions arose not only during conflict and flight, but they also stemmed from the very poor baseline health conditions that existed throughout Burma and the conflict zones or IDP areas (Footer et al., 2014; Physicians for Human Rights, 2011, 2012). Health statistics from the IDP areas were gathered every year by the Backpack Health Worker Team (BPHWT) (see Chapter VI for more details on this group). A 2010 report based on surveys of 5,754 households from 21 townships in conflict zones in eastern Burma, found that infant mortality rate was 54 per 1,000 live births; and the under-five mortality rate was 71 per 1,000 live births (Diagnosis: Critical, 2010). Moreover, at the time the survey was conducted, one in 14 women suffered from *P. falciparum* malaria, reflecting one of the highest malaria infection rates in the world (Diagnosis: Critical, 2010). According to the Global Health Access Program (GHAP), direct losses of life from violence in these conflict zones accounted for only 2.3% of deaths (Diagnosis: Critical, 2010). The indirect health impacts of the conflict, and the effects of being cut off from formal health and social services, were much more serious, with "preventable losses of life" accounting for 59.1% of all deaths and malaria alone accounting for 24.7% (Diagnosis: Critical, 2010). These rates were remarkably high, indicating the crucial need for additional medical services in these areas – if possible trained in both biomedicine and traditional medicine so that they may use all available resources to address the populations' health needs (Lee et al., 2006).

Despite the country's forward movement on a path towards democracy beginning with the elections of 2010 and the series of ceasefires the Burmese

government has signed with various ethnic groups since then, violent conflict and restricted public services persist, particularly pertaining to health care. In fact, the *New York Times* reported on March 13, 2014 that the "Myanmar" government had issued a ban against Doctors Without Borders (Médecins Sans Frontières International) from the state of Rakhine on February 28, 2014, which had already left at least 750,000 people without medical care and resulted in the deaths of approximately 150 people residing within Rakhine state (Perlez, 2014). Moreover, the devastating effects of the military government's historic Four Cuts policy can still be felt in many areas of the country, and government hospitals remain dangerously under-funded and ill-equipped (Human Rights Watch, 2005; Neumann, 2003a; Footer et al., 2014). Refugees and IDPs continue to seek refuge in unstable environments where medical care can be sporadic and is at times forcibly withheld from populations in need (Physicians for Human Rights, 2011, 2012).

What Kinds of Care are Available and Who Provides It?

In this section I describe the kinds of medical providers and medical options that were available to address the medical needs of the Karen people. These options included both Western medical options (as distributed through local and international NGOs) and traditional medical practices. The objective of this section is to provide a comprehensive overview of the main medical players in this region, their missions and target populations. I begin with a brief description of the availability of Western medicine to the Karen, then turn to an overview of traditional medicine and how the Karen medical system fits into the larger Burmese and Ayurveda medical belief systems.

Western Medicine

According to the Thailand Burmese Border Consortium (TBBC), when refugees first started arriving in Thailand in 1984, they were fairly self-sufficient and able to work and forage for their own basic food, supplies and shelter (TBBC, 2007). As numbers and needs increased, the Thai government attempted to discourage mass migration through tightened restrictions over refugee movements and rights.[37] This necessitated broader interventions by the United Nations High Commissioner for Refugees (UNHCR) and international aid organisations, and today there are over 100 international and local NGOs working with Burmese refugees and IDPs along the border, as discussed earlier. Basic health, nutrition and shelter needs in refugee camps are mainly met by international NGOs (INGOs), also known as humanitarian aid organisations, including Aide Medicale Internationale (AMI), Médecins Sans Frontières (MSF), Malteser International (MI), International Rescue Committee (IRC) and American Rescue Committee International (ARC). Table 6 below lists the INGOs that were associated with each refugee camp in this region during the research period.

General health care for acute and primary health concerns in the refugee camps was addressed through out-patient and in-patient departments, and some critical cases were referred to Thai hospitals (although according to my UNHCR and refugee sources, it is very difficult to obtain permission for these transfers). Select organisations also addressed mental health and sexual violence issues and other non-emergency health needs.

37 Thailand's long history of hosting massive waves of refugees has led to government attempts to minimise these trends and burdens on its infrastructure and population (Huguet & Punpuing, 2005).

Table 6

Managing INGOs for Each Karen & Karenni Refugee Camp (2008)

Camp	Nongovernment organisation
Sites 1 & 2	International Rescue Committee
Mae La Oon	Malteser International
Mae Ra Ma Luang	Malteser International
Mae La	Médecins Sans Frontières (now Aide Medicale Internationale)
Umpiem Mai	Aide Medicale Internationale / American Rescue Committee International
Nu Po	Aide Medicale Internationale / American Rescue Committee International
Don Yang	American Rescue Committee International
IDC/Halochanee	Aide Medicale Internationale
Tham Hin	Aide Medicale Internationale (now International Rescue Committee)

Despite these broad-ranging health services, independent and first-hand testimonials have reported that refugees did not always receive high quality health care. Complaints included: aid workers reported working beyond capacity with insufficient and outdated medical supplies (Research fieldnotes: 2005); high INGO staff turnover rates; and Burmese refugees continued to feel that health care delivery is inadequate, culturally inappropriate, and at times "oppressive" (ECHO, 2011). Traditional health practitioners interviewed in this study, and refugees interviewed during 2002 research (referenced in Methodology Chapter) commonly referred to humanitarian health clinics as "paracetamol clinics" due to their overuse of this cough/cold remedy for all common ailments. This practice, among others, indicates a lack of capacity and/or sensitivity on the part of humanitarian health clinics, as well as an inability to address primary health care needs in a sustainable way. As one young Karen mother shared in 2002:

> Every time I bring my baby to the clinic with a fever or cough, we are given paracetemol. This lasts for a few days, but the cough often returns. At home we have (plants and minerals) to treat these coughs and make them go away. Here, they do not ask us about other treatments, or bring in any of our doctors. We return each time and receive more paracetemol. If I could find a traditional doctor we would use our medicines from home. (Research fieldnotes, 2002)

To demonstrate the specific health situation and needs among the camp population, Nu Poe, the third largest refugee camp along the Thai-Burma border, is taken as an example. At the time of this research, Nu Poe hosted 11,148 refugees, most of whom were ethnically Karen. Healthcare in Nu Poe was delivered mainly by the French INGO, Aide Medicale Internationale (AMI), as well as the American Rescue Committee (ARC). In 2002, the average medic to refugee ratio at Nu Poe was 1:600 (ECHO, 2002, p. 18). A 2002 ECHO evaluation found that medical buildings and equipment at Nu Poe were in need of repair or updating, and noted that the high rates of staff change, lack of essential drugs, and poor equipment "leads to de-motivation and to the cycle of further staff turnover, which maintains a vicious circle of events," including poor and inconsistent care for camp-based populations (ECHO, 2002, p. 13).

The emergency, Western biomedical approach taken by humanitarian organisations is vital during the initial phase of most forced migration situations, and such interventions save thousands of refugees' and migrants' lives each year (Cookson et al., 1998; Hansch & Burkholder, 1996). Yet, as discussed in Chapter II and reflected in this young mother's testimony, local leaders and traditional health practitioners played a role in providing health care and psychosocial support within

refugee communities, providing care that is regarded as equally or more valuable in some cases than aid received from humanitarian aid providers. Below I provide a description of the traditional medical systems and options available to the populations the region.

Traditional Medical Options

At the time of this study, there were no comprehensive overviews of Traditional Burmese or Karen Medicine in existing scholarship and I spent a significant part of my research trying to understand and describe the these two systems. This section provides an overview of: 1) the parent medical system to Burmese medicine – Ayurveda; 2) the Burmese medical system as it has been formalised and is currently practiced in Burma; and 3) the Karen traditional medicine theory, cosmology, diagnostics, and treatment protocols – some of which are being defined and formalised by the Karen Network discussed further in Chapter VI.

Ayurveda. As introduced in Chapter II and Chapter IV, Traditional Burmese medicine is derived from the principles of Ayurvedic medicine, India's 5,000-year-old medical system. According to Harrison (Harrison & Pati 2009), the original theoretical concepts at the root of Ayurveda were developed by Buddhist ascetic healers. As monastic orders we were introduced throughout South Asia between 800-100 BCE, these healers brought in and began to codify their knowledge into medical doctrine. The Atharve-Veda texts of 1000 BCE include three foundational Sanskrit texts of Ayurveda: Carakasa_hitā (c. 300-200 BCE), Suśrutasamhitā (c. 200-100 BCE), and Astanāgahrdaya (c. 600 CE).

Today these three texts are disseminated through 54 authoritative volumes on medical theory, diagnosis and practice. Practitioners are trained as 'vaidyas' through

lineage training, or as medical doctors through nationally accredited and regulated medical schools (see next section). Ayurveda was introduced to Burma in approximately 640 AD (WHO, 2001; Neumann, 2003a; Bodeker & Neumann, 2012) and has since evolved and adapted to Burmese cultures and traditions. In Burma – and in most countries and regions where traditional medicine is prevalent – codified and indigenous systems, as well as formally and informally trained practitioners, exist side-by-side to meet their populations' needs (Bodeker et al., 2005b).

Burmese traditional medical system. Burmese medicine, although rooted in Ayurveda, is also heavily influenced by the indigenous practices and beliefs of local regions, religions and ethnic groups, including Buddhist, animist and family traditions, as well as spiritualism and astrology.

The four main branches of both Burmese and Karen traditional medicine include: 1) *Desana naya*, which relates to concepts of hot and cold and Buddhist philosophy; 2) *Bethi tea naya* which is based in Ayurvedic theory and practice; 3) *Netkhata veda naya* or astrology; and 4) *Vissadara naya* which focuses on spiritual practice and alchemy (Linn, 2005; Burma Lawyers Council, 2006).[38]

As discussed in earlier chapters, the Burmese regime's efforts to formalise its traditional medicine system began in 1953, shortly after independence from British and Japanese colonial forces. In 1976, Burma established the Institute of Indigenous Medicine (WHO, 2001, p. 195), which became the University of Traditional Medicine (Mandalay) in 2002 and currently offers three and four-year training programmes that are regulated and recognised by the national Myanmar Ministry of Health (WHO, 2005; Pi Pi, 2009).

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38 These four branches have also been referred to as: dhatu, ayurveda, astrology, and witchcraft.

These moves toward the formalisation of a traditional medicine system were generally regarded as forming part of the broader nationalist, isolationist agenda pursued by the military junta since Burmese independence (Bodeker & Neumann, 2012). At the same time, however, the process of formalisation has helped to preserve and strengthen indigenous knowledge and resources in this area (Bodeker et al., 2006). This process of formalising traditional knowledge systems is seen throughout the Southeast Asia region (Bodeker & Burford, 2005) and although this move has nationalistic tendencies in Burma, it is useful to contextualise it within broader region-wide trends. The following section illustrates this trend towards traditional medicine formalisation through a list of formal traditional medicine training programmes within WHO's Southeast Asia Region.

Training and service delivery in Burmese medicine. According to WHO, there were over 8,000 traditional practitioners trained and/or registered by the Burmese government in 2001 (WHO, 2001).[39] Furthermore, the World Intellectual Property Organisation (WIPO) estimates that by the mid-2000s, there were approximately 16,000 traditional medicine practitioners – both government and informally trained – practicing in Burma (WIPO, 2010). As outlined in the table below, the 8000 practitioners registered with the Burmese government have completed four years of education at the Mandalay college of traditional medicine, followed by a one-year practical internship. The remaining practitioners, an additional 8000 according to WIPO, are reported as having completed a 10-month qualification course, as well as subsequent 2-month refresher courses. In the ethnic minority

39 As of 2014, an update of this report had not been released.

regions including Karen State, training tends to be locally developed and regulated by indigenous and community authorities.

Table 7 demonstrates that Burma's training structure is comparable to other programmes in the region. Degree programs include an average of five years of study, followed by 6-12 months of practical internship experience. The longest and most rigorous programs are in India and Korea, and as of 2006, India had 259 undergraduate colleges and 69 postgraduate institutes. Ayurveda is pervasive as the base medical system in South and Southeast Asia, and all of the traditional medicine training programs in the region – with the exception of DPRK – are based in a combination of Ayurveda and local indigenous systems.

Burma only has one nationalised medical school, but as of 2004, traditional medical services were delivered through two 50-bed traditional medicine hospitals in Mandalay and Yangon, ten 16-bed traditional medicine hospitals in other areas, and multiple rural clinics throughout Burma (WHO, 2004).

Although Burmese authorities continue to make public their efforts to honour and formalise the traditional health knowledge and systems of Burma, sudden decisions like the expulsion of Doctors Without Borders from Rakhine state in early 2014 reveal the troubling remnants of authoritarian rule that persist within the country (Perlez, 2014). Within this tumultuous, conflict-prone context, Karen authorities continue to pursue efforts to formalise the Karen traditional medicine system to: a) provide services as populations remain cut off from and affected by conflict; and b) to fulfill a desire to formalise their own similar but separate, independent traditional medicine system.

Table 7

Traditional Complementary and Alternative Medicinal Educational Programmes in the South-East Asia Region

Country	Programmes	Curriculum
Bangladesh	9 Unani and Ayurveda institutes under Ministry of Health (MOH) regulation	4–5 year courses + 1 year clinical internship
Bhutan	1 programme under MOH National Institute of Traditional Medicine	5½ year graduate course, 3½ year assistant course + 6 month internship. Includes some allopathic medicine methods.
Democratic People's Republic of Korea (N. Korea)	Traditional medicine programme within each medical school (one per province)	7 year course. 30% of curriculum focused on allopathic medicine.
India	259 undergraduate colleges; 69 postgraduate institutes	Bachelor, MD and PhD degrees of various lengths in Ayurveda, Siddha, Unani, Homeopathy, Naturopathy and Yoga (AYUSH)
Myanmar (Burma)	1 national institute (Mandalay); various local	4 years +1 year internship for diploma; 10-month qualification and 2-month refresher courses for lay traditional medicine practitioners
Nepal	1 programme (Tribhuvan University)	4 year Bachelors degree (BAMS) in Ayurveda
Sri Lanka	Various indigenous and Ayurveda programmes	Basic medical and PhD degrees
Thailand	Various public and private, formal and informal	National Institute & national NGO offer 3 year courses in pharmacy, Thai traditional medicine, Ayurveda, massage, reflexology; primary and secondary school programmes (non-formal); Wats

Note. Adapted from Bodeker, G., Neumann, C., Ong, C., and Burford, G. Training. *Public Health and Policy Perspectives on Traditional, Complementary and Alternative Medicine.* Copyright 2006 by Imperial College Press.

Burmese medicinal plants. The Burmese government's Department of Indigenous Medicine reports having registered 3,962 medicinal plants, mineral and materials, and it has granted production licences to 632 traditional medicine manufacturers throughout Burma. Some of the most commonly used medicinal plants

used in Burma and by traditional health practitioners involved in this research have been studied extensively in India and the West. Among these are: *Andrographis paniculata, Azadirachta indica* (neem), *Curcuma longum* (turmeric), *Ocimum sanctum* (holy basil), *Annona squamosa* (sugar apple), *Berberis vulgaris* (barberry) (Thaker & Anjaria, 1986; Heinrich et al., 2003). While evidence is growing in support of the efficacy of some of these remedies, further study is needed on all before they meet international requirements for safety and standardisation.

Traditional Karen medicine. Karen traditional medicine is a related but distinct system from Burmese traditional medicine. As noted above, it shares many of the philosophical tenets and diagnostic categories of the Burmese system, but relies more heavily on local beliefs, practices, and oral traditions.

And although key informant practitioners involved in this study had access to comprehensive reference books on medicinal plants of the region, had documented master practitioners' knowledge in handwritten texts, and were in the process of formalising a teaching curriculum through their training programme (over the course of this study period), I found that there was no published, comprehensive overview of the Karen Traditional Medicine system available.[40] There are signs that this trend is changing with a more receptive Burmese government, but at the time this research was conducted, it was very difficult to access detailed descriptions of Burmese or Karen Traditional Medicine. As noted above, the Burmese government had formalised Burmese medicine and established training colleges[41] and monitoring

40 This overview was also included in my recently co-authored paper for the *Journal of Immigrant and Refugee Studies* (Bodeker & Neumann, 2012).

41 I have tried regularly and repeatedly over the past nine years to access documents from the Myanmar Ministry of Health related to their traditional medicine system and programmes. To date, I have had no success.

bodies, but these comprehensive reference books were not available to border populations. It therefore became a significant objective of the current research to begin the documentation process of this previously undocumented Karen medical system and explore its potential contribution as a resource that serves the social service and health care needs of the local Burmese and Karen communities.

Nationalised Burmese traditional medicine draws mainly on formalised texts and trains traditional health practitioners through nationally-recognised degree and certification programmes overseen by Ministries of Health (Skidmore, 2011). Karen traditional medicine, as it has developed locally and as it was being shaped by Karen National Union (KNU) authorities during this study period, draws on the same four official branches, but differs in three main ways: 1) it emphasises *Bethi tea naya* above the other branches; 2) it focuses on local medicinal plants of Karen State; and 3) it seeks to codify oral traditions of Karen master practitioners. While the four branches of Burmese and Karen traditional medicine were briefly mentioned earlier, the detailed findings of this research – drawn from a combination of primary informant data and secondary research – on the significance and function of these four branches of local traditional medicine are outlined below:

1) *Desana naya. Desana* has been described as consisting of "all the words or teachings delivered by the Buddha Himself during His life-time" (Panna Dipa, 1998, para. 20). More concretely, in Burmese and Karen medicine, *Desana* relates to concepts of hot and cold seen in many indigenous medical systems, and draws on Buddhist philosophy for wider conceptualisation of health and disease. Theories of hot and cold relate to internal as well as external factors such as weather, diet, seasonal changes

> and blood circulation cycles. According to these theories, diet and weather can exacerbate and create illness. Blood circulation is thought to run in two consecutive 6-week cycles of ascending and descending, which must be considered during diagnosis and treatment (MacDonald, 1879). Medicines are given for various conditions on the appropriate day, which is determined by the blood cycle.

Master monk practitioner Ashin La (one of my key informants) noted an increase in conditions related to hot and cold imbalance following the conflict in Burma:

> Most conditions I see since conflict intensified [post-1989] are caused by too much heat such as "hot gland," not being able to speak, sore throats, and breast cancer in women. These changes are mainly caused by the change in foods displaced people are meeting when they come into more contact with cities and modern life… the food is not natural and people eat a lot of modern food mixed with chemicals, which causes bad health. The water is also cleaned by modern chemicals, and comes from plastic and iron pipes that cause bad health. In Burma the water comes from the lake and is well-made by stone which makes for good health.

Also discussing *Desana*, 55-year-old Burmese Astrologer Dr. Seyaing (another of my key informants) explained that to diagnose such conditions, he checks the patient's pulse, veins and the arteries in their wrist, looks at their face, and sees if their eyes are different than usual. He shared that he learned the traditional medicine practice from his father and a monk. Regarding treatment, he said, "Many medicines are effective for releasing heat because many illnesses are caused by heat and

inflammation in the body. There are also ingredients for too much cold in the body." He listed other causes of heat or cold, including the fact that eating too much fresh green papaya cools the body. Dr. Seyaing continued, "Food is very important because it can make you sick, poison you. Some people are okay with papaya, banana." He concluded that it all depends on a person's blood type, body temperature, and heart rate.

2) *Bethi tea naya* refers to Ayurvedic medical theory and practice, including diagnostic methods using universal elements, pulse diagnosis of mind-body constitutions – *doshas* (literally 'impurities' or governing metabolic principles), or *dats* – from the Ayurvedic *"dhatus"* or basic tissues, which maintain and nourish the body. This study found that local Karen practices may indeed be more sophisticated for certain practices than modern day Ayurveda. For example, in Ayurveda as it is practiced today, pulse is read at three points on the wrist. Yet according to Ashin La, the pulse can be read on eight places on the wrist and hands, each linked to a different level of disease and imbalance.

Extensive use is made of herbal and mineral compounds for treatment in this branch of traditional medicine. Ayurvedic theories, as adapted into Burmese and Karen traditional medicine, are referred to as the "*dat* system" which corresponds to the four elements of the body including Wind, Fire, Water, and Earth, all which are held in motion by the Heaven element. Based on information gathered from the secondary sources of MacDonald (1879) and the World Health Organization (1985, p. 310; 2001), and the primary data generated from interviews with master traditional medicine practitioners (who are also Buddhist monks) in the Mae Sot district at the

Thai-Burma border, this researcher found that the *Bethi tea naya* branch of Karen/Burmese traditional medicine includes the elements and mind-body constitutions shown in Tables 8 and 9. Within this system, diseases result from three sources: the destruction of entire constitutions; suppression of any one element; or the "disorganisation" of the earth element. According to MacDonald (1879), earth is said to be the chief of all elements and must be in balance for the maintenance of good health.

Table 8

Panchamahabhutas (Universal Elements and Associated Properties)

No.	Pali	English	Colour	Taste
1	Pa-hta-we	Earth	Dark black	Rich taste
2	Ar-paw	Water	Red and pink	Sweet, salty
3	Tae-zaw	Fire	White	Sour and spicy
4	Wa-yaw	Air	Yellow	Bitter

Note. Panchamahabhutas refers to Ayurveda's five elements, which includes these four elements + space (*akasha*, in Sanskrit). Burmese theory uses only four but also relies heavily on spiritual elements, which can be interpreted as a form of the space element.

Table 9

Doshas (Mind–Body Constitutions) Used in the "Dat system"

No.	Name	Meaning
1	Vata	Motion (physical and mental)
2	Pitta	Metabolism (digestion, absorption and assimilation)
3	Kapha	Cohesiveness (body's structure and stability)

3) *Netkhata veda naya,* or Burmese astrology*,* uses calculations based on the zodiac, planet alignment, and the patient's time of birth and age. Treatments often include the prescription of diet, lifestyle and behavioral changes. One practitioner involved in our research, a master of *Netkhata veda naya*, noted that he is blind to a patient's needs until a patient's

"numbers are read." Once read, prescriptions are given for future behavior, such as places to go or avoid, specific foods to eat, as well as certain warnings regarding health and destiny. Most importantly, once a patient seeks out this advice, he or she must assume the advice to be true and follow accordingly.[42]

4) *Vissadara naya* relates to spiritual practices such as meditation, and also incorporates alchemical practices using minerals and metals (Linn, 2005; Burma Lawyers Council, 2006). This branch of traditional medicine in Burma and among the Karen plays a strong role in mental and spiritual health concerns. Burmese spiritualism is based on a complex system of spirit worship. While it is not directly related to Buddhism, this belief system has become part of the spiritual practice and beliefs of the greater Burmese peoples, including some percentage of Buddhist, Christian and Muslim populations, as data generated as part of this research demonstrate. Within this system, belief in spiritual entities and agents is linked with beliefs about the causation, progression and treatment of illness, phenomena which are perceived as being affected by a panoply of spiritual entities including witches, demons, ghosts and Nats (Spiro, 1967). Spirit influence is believed to include possession and illness. Accordingly, treatment methods incorporate spiritual healing and exorcism. A number of examples of Nat worship have already been outlined.

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42 Use of *Netkhata veda naya* by Burmese authorities is seen in the military junta's heavy, even obsessive, occupation with numbers and prophecies. The most visible effect of this was seen in the regime's 2005 move of its capital to Pyinmana near the Karen state border in inner Burma based on an astrologer's predictions (McGeown, 2005).

Although *Desana* and *Vizzadara* treatments are sought mainly by Buddhist patients, as noted above, this researcher's findings indicate that Karen Christian and Burmese Muslim patients also sought these treatments (Bodeker et al., 2005a).

To summarise, the four branches of Burmese and Karen traditional medicine theory outlined above demonstrate the belief that health is related to interactions between the physical body, spiritual elements, and the natural world. Illness within this system is believed to be caused by a physiological imbalance, which may begin on both physical and spiritual levels. Illness is classified as imbalance and therefore treatable, until the very final stages, at which point it is classified as a disease.

What do the Karen People Believe and Do When They are Ill?

As was addressed in previous chapters, traditional medicine is a common form of primary health care in many developing countries, with up to 80% of some African populations relying on traditional medicine for primary care (Bodeker et al., 2005b). In areas where Western medicine is unavailable, as in many remote villages of Burma, and in areas where traditional medicine is the health system of choice, populations rely heavily on traditional medicine for primary health care. In a 2006 interview, Dr. Jonathon Nield, a tropical medicine physician who has been serving the Thai-Burma border population for 11 years, described the situation thus:

> I would guess that most all of my patients and their community members use some sort of traditional medicine… Burmese and Karen people use all sort of herbs, leaves, things from the forests, for just about anything: diarrhea, asthma, diabetes, kidney infections, and pneumonia… many others. (Interview conducted by the researcher, 2006)

Prior research provides evidence that Karen refugees and migrants possess a baseline familiarity with and reliance on traditional medicine for healthcare (Belton & Maung, 2004; Lopes Cardoso et al., 2004; Bodeker et al., 2005a). Indeed, traditional medicine remains a source of health care for many of Burma's ethnic minorities.

The following sections introduce findings from my 2002 Master's research, and follow- up, second-hand ethnography from 2007; both investigations focused on knowledge and use of traditional medicine by Karen migrants and refugees along the Thai-Burma border area. This research helped substantiate initial evidence that border populations are familiar with and seek traditional medicine to treat common, chronic and acute health conditions, including psycho-spiritual and mental health issues.

Lay Knowledge of and Confidence in Karen Traditional Medicine

I found during my fieldwork that a majority of Karen migrants and refugees were knowledgeable about traditional medicine for a range of primary health needs. Based on the two small surveys that I and my colleague collected in 2002 and 2007 with immigrants and IDPs (see Chapter IIIf for details), a significant number of survey respondents reported that displacement had made it increasingly hard or even impossible to access medicinal plants or traditional practitioners they knew and trusted. More than half voiced a desire to access traditional medicine if it were available in their current setting. These individuals saw traditional medicine as an important resource to address health and social service needs and looked to local organisations to assist in supplying this resource.

On the topic of traditional medical knowledge and use, approximately 90% of all respondents in both surveys (108 of 118) listed some knowledge and/or use of traditional remedies. Combined respondents listed a total of 393 traditional Burmese

(Karen) medicines and remedies for the treatment of common and acute conditions, many of which were learned from family members or accessed through local traditional health practitioners and herbal markets in home villages. Figure 8 shows one refugee participant who shared a traditional remedy for treating urinary infections that is made from a common herb. The documented prevalence of traditional knowledge among the local population pointed to the ability of Karen and other ethnic minority individuals and groups to play a pivotal role in the delivery of social and health services within their own community. Of all remedies listed by laypeople in the 2002 and 2007 surveys, a total of 218 (over 50%) were used to treat Mae Tao Clinic's most common conditions,[43] indicating that laypeople had a significant knowledge for self-care, as well as the opportunity for the development of a more collaborative, integrated approach to local health care alongside humanitarian aid agencies in the region.

The need for this type of horizontal, integrative collaboration between traditional medicine and Western biomedicine paradigms is further demonstrated by my findings from the 2002 survey where 37 of the 59 (63%) respondents believed traditional medicine was to some degree effective for their current condition, but reported that they had turned to Western medical care due to displacement issues at the time or lack of access to traditional health practitioners or traditional medicine resources. Other respondents believed that their illness type or severity could only be adequately addressed by Western biomedical care, whose practitioners had access to the necessary resources for proper treatment (Bodeker et al., 2005a).

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43 In 2001 the Mae Tao clinic treated a total beneficiary population of between 150,000 and 200,000. Conditions treated fell into seven major categories: acute respiratory conditions (49%), followed by malaria (19%), anemia, skin disease, diarrhea, gastric and urinary conditions. Malaria resulted in the highest fatality rate. Over 50% of remedies listed by survey participants were used to treat these same seven conditions. No update was available since the 2001 information.

Figure 8. Refugee survey participant displaying common herb used for urinary infections.

Lay Utilisation and Barriers to Karen Traditional Medicine

Approximately 20% of respondents in both surveys (15 in 2002 and 16 in 2007) stated that displacement had severed ties or created too much distance from traditional health practitioners or from families who know remedies best. These same lay respondents also cited their distance from traditional family shrines, which they viewed as offering spiritual protection, as well as their lack of access to familiar medicinal plants. Slightly more than half of combined 2002 and 2007 survey respondents (62 of the combine 118) stated that they would seek traditional health care if it were safely and locally available in the border region – for example, if they knew of a traditional health practitioner in their current place of residence, or if there was an herbalist posted at the Mae Tao Clinic where they sought treatment (Neumann, 2003a; Bodeker et al., 2005a).

One middle-aged Karen woman interviewed in 2003 voiced her desire to use traditional medicine, but explained that it was impossible for her to access the resources due to the conflict:

> I have lived on the Thai side of the border for three years now. In my home village in Burma, many Karen would use traditional medicine for fever and disease, and they knew how to make and use their own remedies. We were too far from the city, so we used the local doctors that lived in the village, especially Karen doctors. In a city in Mon State where our village is, there is a very famous Karen doctor who advertises his medicine. He is very successful in treating fevers, and can cure people in only three days. There are many monks around our village who grow herbs that Karen doctors use. I wanted to go back to my village for a remedy for my husband, but I could not go because there is fighting there now. That is why I brought my husband to the clinic to the Western doctors instead. We have been here for six weeks. (Research fieldnotes, 2003).

This data lend evidence to the claim that traditional medicine practice is common among Burmese villagers, dating back to before conflict began. Moreover, it implies a baseline familiarity and reliance on traditional medicine for healthcare among Burma's ethnic minorities, evident through these studies. These findings also indicate that surveyed refugees and migrants along the Thai-Burma border would seek traditional health care if it were safely and locally available.

A significant indication of these findings is the lack of knowledge among the border population that traditional medical resources already exist, with those resources available through the Karen Network as a case in point. More than 50% of

respondents in both samples indicated that they would seek traditional medicine but were *not aware of how to access it*. Among Karen migrants surveyed in 2007, only 24% were currently using traditional medicine, although 71% had used it in the past, indicating little awareness about the current services provided through the Karen Network.

One 45-year-old Karen women who visited the Mae Tao Clinic with her son in 2002 explained how she had used traditional medicine at home before coming to the clinic. She explained how the older traditional medical doctor in her village died and how traditional medicine was being lost. In her village, she could buy fruit, roots and leaves useful to make medicine at home. "This helps," she said, "because most people have no time anymore to find their own ingredients in the jungle or mountains. I think traditional medicine is good and lasting. Sometimes it takes a long time to get better, but then you stay well" (Research fieldnotes, 2002). She found that western medicine, in comparison, is only effective short-term, and then the fever or illness often comes back again. This woman, and many others who visited the clinic, demonstrated no knowledge of TRM being available to her in the Thai-Burma border setting.

Data from the 2002 and 2007 surveys also provided insights into the plurality of the traditional medical systems of Burma and confirmed that these systems are based in a wide range of beliefs, medical traditions, and religious or animist influences. For example, of the 59 respondents surveyed in 2002, 30 were Christian and Buddhist Karen, 16 were Rohingya Muslim, and 13 were Buddhist Burman, Shan, Mon and other. Although polytheism is not formally tolerated within Christianity and Islam, this study found fairly fluid beliefs and practices among all Burmese ethnic and religious groups interviewed, indicating that traditional medicine

is a resource that spans many traditions and paradigms. Among Muslim respondents, five respondents out of 16 believed in Burmese spirits, or Nats. As mentioned earlier, the Burmese people's belief in Nats or ghosts is a significant component of their traditional medicine paradigm, which corresponds to one of four main branches of Burmese and Karen traditional medicine, known as *Vissadara naya*.

Among Christian Karen, ten respondents noted some form of belief in Nats, ghosts, or other spiritual forces, while at the same time confirming their belief in one God. Both Muslim and Buddhist master practitioners involved in this study noted that migrants of all faiths and ethnicities came to them for amulets, holy waters, and plant-based remedies that were often based outside of these patients' individual ethnic or religious tradition. One Karen traditional health provider, Dr. Ne Yaing, explained, "The peoples from Burma each claim a certain religion, but when they come to me they ask for amulets and offerings for their family Nats, regardless of their religion." He continued, "Most people, especially when they are sick or feeling fear, don't feel a conflict with these beliefs. They have faith and are open and ask for my guidance on best cures." Dr. Ne Yaing concluded that this behavior was "because of our history. We have always lived with many beliefs and traditions and languages" (Research fieldnotes, 2005).

In a conscious effort to address gaps in health service delivery and cultural competency in camps and to meet critical needs in IDP areas, the Karen Network launched herbal clinics, training programmes, and individual practices serving multiple refugee camps, IDP areas and border villages during the research period.

One THP informant stated:

> The people have so many needs. They are searching for homes, they are searching for their family members, they are searching for food… and these troubles cause many of them to become sick. By providing medicines from the jungle, and helping them recognise which ones to use, we can alleviate some of the suffering, and also help our youth feel like they have a purpose. It is our duty.

In Chapter VI, I outline how Karen Network began to formalise the practice of traditional medicine and expanded its services. And in Chapter VII, I describe the initial effects that this evolution had on the health needs of the Karen people, while at the same time strengthening their group identity and self-determination movement.

CHAPTER VI: THE EVOLUTION OF THE KAREN TRADITIONAL MEDICAL SYSTEM

This chapter traces the rapid formalisation process that the Karen traditional medical system underwent between 2001 and 2011 prior to and throughout my study period of 2003 – 2011, and describes the roles that key individuals and organisations played in this evolution and the social and political context in which it occurred.

Unlike the traditional Burmese medical system that had already been formalised at the national level in terms of codifying knowledge, diagnostic categories, and treatments and that had established a system for training practitioners and distributing care across the region, the Karen traditional medical system in 2001 was in the early stages of its evolutionary transformation. Below I describe how the Karen system moved from a disjointed set of individual practitioners with a wide range of knowledge about herbal medicines to a more shared and explicit compilation of knowledge and network of practitioners that trained and practiced together.

I begin by providing a brief history of the Karen traditional medical system and the key individuals and organisations involved in its evolution. I next examine the formalisation process and describe each of the major phases of activities including: early discussions; ongoing network development, knowledge preservation, developing curriculum and training Karen youth; and database and handbook development. I end by describing the multiple roles that the larger social and political context and infrastructure played throughout the process, and how these forces helped concretise the Karen TRM knowledge and system through the passage of formal policies. Further, I discuss how the formalisation process affected the larger social and political structures, including the Karen efforts to further their own self-determination.

History

As outlined in Chapter IV, the Burmese refugee situation is one of the largest and longest-lasting refugee situations in the world today. The Burmese military's Four Cuts Policy, enacted in all ethnic minority regions along the Thai-Burma border, consistently and violently displaced local communities. Displacement weakened or severed populations' ties to place and community, including ties to existing social and knowledge systems like traditional medicine. It also minimised or cut off access to trusted practitioners. As reviewed in Chapter V, nearly 65% (37/59) of refugee/migrant respondents surveyed in 2002 believed traditional medicine was to some degree effective for their current condition, but due to issues of conflict and displacement, including the danger in returning home to access traditional practitioners, these patients had turned to refugee or humanitarian aid clinics to treat their current condition. (Bodeker, Neumann et. al 2005)

Historically, traditional Karen medicine was deeply rooted in place, embedded in local communities through family lineage or based in established monasteries where knowledge was passed down through oral tradition and apprenticeship. Master practitioners, trained through family lines or at these monasteries, would then expand their practice or return home to service a broad area of multiple villages. Conflict not only cut off populations' access to trusted practitioners as noted above, but also destroyed villages and established monasteries, displacing practitioners. This can be seen through the story of one practitioner interviewed during my research:

> Dr. Seyaing was the descendent of one of the 'warrior' traditions of the Karen people, and trained in traditional medicine for many years under his father as well as a very renowned monk of his region. His practice was strong when he

was young, but when fighting began, his land was confiscated by the SPDC, and he was forced to drop his practice in order to earn money for survival. Conflict and unstable conditions also prohibited him from accessing his monk-teacher to continue studies and apprenticeship. Despite his will to continue studying and practicing, Dr.Dr Seyaing was forced to not only give up his own practice, but also lost his ability to access TRM care for him and his family. This case provides an example of the challenges faced by many THPs attempting to practice in the conflict zones of Karen State.

Figure 9: Dr.Dr Seyaing and his family at Mae Tao Clinic for treatment.

The Karen National Union – through its departments like the KDHW; partners like GIFTS, Mae Tao Clinic, and KESAN; and an extensive network of practitioners – sought to remedy this loss of Karen traditional medicine practice and use by local populations. Through this process, practitioners formalised what was previously a localised set of beliefs and practices. Due to the lineage-based and locally-focused nature of Karen medicine, prior to my study period there was little organisation or coordination across THPs and monasteries. It can also be assumed that conflict would have exacerbated any challenges faced if and when THPs attempted to coordinate their efforts.

The following sections introduce these key practitioners and organisations, and describe the evolution that led to a revitalisation and formalisation of traditional Karen medicine in this region.

Key Individuals and Organisations

The evolution that led to the formalisation of Karen traditional medicine was catalysed by a number of key individuals and organisations including: five senior herbalists and master practitioners who had between 15 to 35 years of training and experience in TRM, the Global Initiative for Traditional Systems of Health (GIFTS), and the following Karen organisations: KNU's Karen Department of Health and Welfare (KDHW), the Mae Tao Health Clinic, the Backpack Health Worker Team, the Karen Environmental and Social Action Network (KESAN), and the Burma Medical Association (BMA). These individuals were briefly introduced in the sampling section of Chapter III.

The majority of traditional practitioners involved in my study, including these five senior herbalists, described themselves as being "informally trained". On its face,

the notion of *informally trained* practitioners may seem to imply that those without formal training have an inferior or inadequate knowledge base in the medical system they practice. Yet formal training does not necessarily prepare practitioners to meet the critical needs of a forced migrant population or deal with the realities of health care in a conflict zone. Although informally trained, the key informant THPs in my study had decades of practical experience in TRM and had become the primary source of health care for large groups of refugees, migrants, and IDPs. [Note: it is also possible that regardless of training, many of these THPs would not be legally recognised by the Burmese government, as the "Indigenous Myanmar Medical Practitioners Board Act 74" reserves the right to refuse or restrict any THP from practicing, and the government has in the past viewed THPs delivering healthcare in Karen state as supporting "the enemy". (KESAN, 2005)]

The organisations involved in my research included both international and local non-governmental organisations. Each focused on a specific area of need among local populations, but only a few, including GIFTS and KESAN, focused explicitly on traditional medicine prior to the study period. Because traditional medicine is one primary source of care for the Karen people, each organisation was aware of this system and the population's use, even informally, of herbal medicines and home remedies, but traditional Karen medicine had not been identified by all as a critical source of care.

Below I briefly describe the background and historical experiences of each key informant practitioner and organisation involved in my study.

Dr. Hsaw Thein (Director, KDHW)

As Director of KDHW, Hsaw Thein was primarily responsible for health service delivery in seven districts within Karen State, Burma. Hsaw Thein was also a senior herbalist, and received his training and experience through family heritage and practice in villages within Burma. Hsaw Thein spent the majority of his time as KDHW Director on health advocacy and programme development, with TRM becoming one of the top priorities during my research period. His TRM-focused activities included acting as coordinator of three herbal clinics along the southern Thai-Burma border: the refugee camp clinics at No Poe and Umpium, as well as the Paw Bu Hla Hta IDP clinic. As the leader of the *Karen Health Network*, he strongly prioritised documenting and strengthening traditional medicine knowledge, as well as training new health leaders throughout all Burmese refugee and IDP areas. According to Hsaw Thein, traditional Karen medicine was affordable, culturally familiar, locally available, effective, and often produced fewer side effects. He believed that perpetuating Karen TRM also helped preserve the autonomy and identity of the Karen people. Hsaw Thein listed his main TRM-related priorities as: 1) Select young people from Burmese villages to train in traditional medicine, 2) Place these young graduates back in their villages as practicing herbalists, 3) Ask herbalists to record their own and their communities' herbal knowledge for future practice, training, and research, in order to preserve knowledge that may die out as master practitioners pass away. When group meetings were called in Mae Sot, Hsaw Thein and KDHW took main responsibility for convening participants from the various border areas, facilitating meetings and managing output. One of Hsaw Thein's additional stated objectives was

to build alliances with Western aid organisations in order to create an 'integrative' and collaborative setting.

Ashin La (Master Monk Practitioner, Mae Sot Vicinity)

Key informant Ashin Hla is the abbot of a monastery approximately 10km outside of Mae Sot. Ashin Hla is a master practitioner, and possessed the highest level of traditional medicine knowledge within my research group. He was also highly regarded by refugees, IDPs, and local health leaders throughout the border region. Ashin Hla became a monk as a young boy, and began studying and practicing herbal medicine at age 18, which was passed down to him through many generations of his family. In 2007, he had been practicing for 34 years – 24 of those in Thailand after fleeing Burma's oppressive policies. He settled in this small Thai-Karen border village as there was no temple in the area, and has been practicing as a monk and healer ever since. Most of the Thai and Burmese patients (Burmese were mostly of the Karen ethnic minority – those fleeing persecution by the Burmese government) came to see Ashin Hla after seeking care in hospitals and being turned away because their conditions were too chronic, severe, or 'incurable'. Over the years, Ashin Hla built a large 'clinic' at his temple, constructing three buildings for patients and their families to stay while they received treatment, at one point treating and housing nearly 100 patients at a time.

Mahn Ner Lay (Director/Senior Herbalist, Nu Poe Herbal Clinic)

Mahn Ner Lay was Karen, 45 years old, Roman Catholic, and able to speak Burmese and two different Karen languages. He gained his traditional medicine knowledge from his grandfather while growing up in Burma, and continued to strengthen it through training within communities, through the study of Burmese

traditional medical texts, and through his own practice. Mahn Ner Lay lived at the Nu Poe refugee camp, and was an active member of the camp's administration department. Through this position, he forged the only recorded, and successful, partnership with an INGO during my study period. He envisioned the camp herbal clinic as playing a complementary and preventive role within the greater public health agenda at the camp, repeatedly encouraging and welcoming input and collaboration from larger INGO health authorities. As director of the Nu Poe clinic, Mahn Ner Lay oversaw the curriculum development, recruitment of young trainees from within the camp and from eight IDP areas, cultivation of an herbal garden, and the training of over 30 young refugees and IDPs to become herbalists for their own camps and communities. He also systematically recorded and refined his knowledge and the training curriculum based on clinical outcomes. Mahn Ner Lay's stated that his main priority was training young men and women to become herbalists and leaders, but he was also very focused on community education, in particular related to nutrition. Mahn Ner Lay was also a main contributor and proponent in the development of an herbal database and resulting handbook for community use. More on the outcomes of his work through Nu Poe herbal clinic are outlined in Chapter VII.

Thay Dah Soe (KDHW Deputy and Herbalist)

Thay Dah Soe studied herbalism for 20 years through interaction and practice in villages within Burma. Thay Dah Soe studied and learned to practice while travelling through border villages acting as herbalist and primary care provider, relying on both traditional medicine texts and Western public health guides (i.e. "Where There is No Doctor") to serve villages without established herbalists or clinics. As of 2007, Thay Dah Soe continued to spend the majority of his time

travelling and serving IDP populations with primary Western and herbal care. His main priorities and goals for present and future TRM advocacy work, as voiced in our meetings and interviews, included enhancing TRM education in refugee camps and border villages, as well as mobilising networks of THPs to work together.

Dr. Ne Yaing (Muslim Burmese Doctor, Independent Clinic, Mae Sot)

Dr. Ne Yaing was a 50-year-old Muslim Burmese doctor who resided in Mae Sot. Before arriving in Mae Sot in 2000, Dr. NY spent 20 years roaming through Burma as a travelling doctor, learning, teaching, and treating. As he was travelling through a village near Bago, he came upon a family of descendants of the royal family who held part of the handwritten palm leaf medical texts passed down from King Thibaw's palace minister and doctor, U Po Hlaing. U Po HLaing had travelled to India to study Ayurveda, returned to the palace, and before he died, wrote Burma's master medical texts. The entire text was written in verse so it might be memorised and passed down through the generations fluently. Dr. NY had memorised the text, and now this doctor of Muslim and Burmese descent uses the Koran, ancient palm leaf texts, and the plants around him to treat and heal. Figure 10 shows the extensive records kept by this practitioner, demonstrating the systemisation of his knowledge and records of his patients. Figure 11 shows him sitting in his home-based clinic.

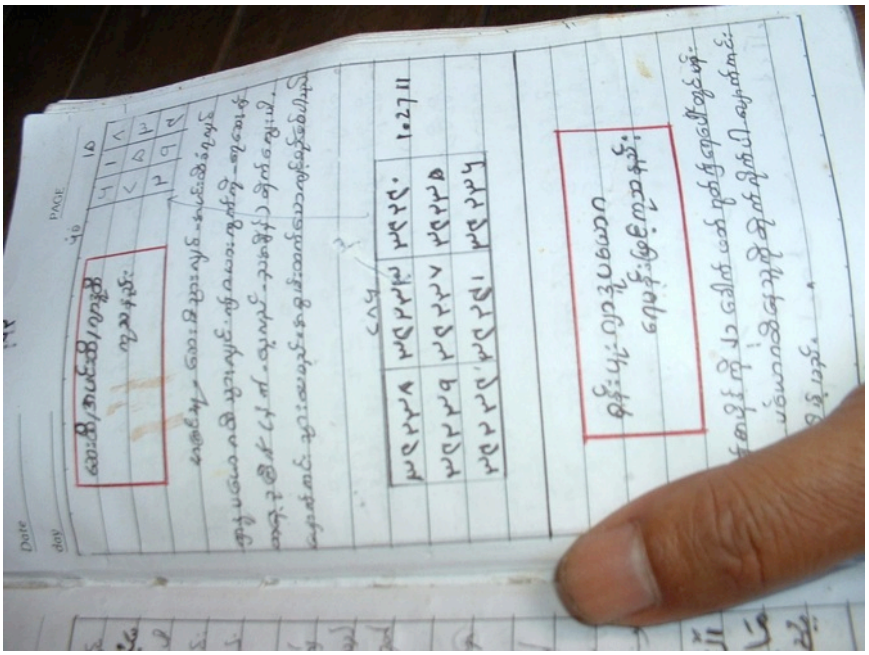

Figure 10. Traditional Burmese medicine and spiritual remedies. Taken from the journal participant THP, Dr. Ne Yaing.

Figure 11. Photo of Dr. Ne Yaing in his home-based clinic.

Hti Shaw Lay (Staff Director/Herbalist, Umpium and Paw Bu Hla Hta Herbal Clinics)

Although Hti Shaw Lay (shown in Figure 12) was not one of my key informants, his story was compelling and worth sharing as part of the practitioner profiles. Hti Shaw Lay was a staff director at the Umpium herbal clinic and an Herbalist at Paw Bu Hla Hta IDP clinic, and was called in by Mae Tao Clinic's medical director to oversee a trial intervention for a young AIDS orphan. The young

boy was suffering from chronic HIV-related fever and other complications and was not responding to conventional medication. Herbalists involved in the original 2001 herbalist training programme co-directed by GIFTS discussed the case and decided to choose Hti Shaw Lay, a senior and experienced herbalist, to treat and oversee this case. Within several weeks, the child's fever had gone, an enlarged liver had returned to normal size, and new complications that developed were managed with ongoing success. Subsequently, through lack of funding to support his service, the herbalist was unable to commute from a rural area. Later, thanks to voluntary contributions from Mae Tao Clinic expatriate staff, the child was put on a course of anti-retrovirals and maintained a stable state of health. Hti Shaw Lay continued as staff director at the herbal clinic in Umpium camp where his main priorities were treatment, documenting traditional medicine knowledge, and training young staff in herbal medicine. He also continued to serve as an herbalist at Paw Bu Hla Hta IDP clinic.

Figure 12. Hti Shaw Lay with his young patient.

GIFTS

Global Initiative for Traditional Systems (GIFTS) of Health, an Oxford, UK-based organisation, was founded in 1993 with the aim of building partnerships at a global level between traditional (i.e. indigenous) health practitioners, scientists, educators and decision-makers, in order to improve health services, especially in rural areas of the developing world (www.giftsofhealth.org). My entry point into this research was through GIFTS of Health. GIFTS' activity along the Thai-Burma border began in early 2001 at the request of Dr. Cynthia Maung, founder of Mae Tao refugee and migrant health clinic and leader of the BMA, a refugee doctors' association in Mae Sot.

GIFTS conducted its research and work in the region in close collaboration with the Burmese and Karen-led organisations that played key roles in formalising Karen Traditional Medicine. These organisations included the KNU's Karen Department of Health and Welfare (KDHW), the Mae Tao Health Clinic, the Backpack Health Worker Team (BPHWT – supervised in part by Mae Tao and KDHW), the Karen Environmental and Social Action Network (KESAN), and the Burma Medical Association (BMA). (As noted above, for ease of reference I refer to this group as the *Karen Traditional Health Network* or Karen Network.) These organisations and their recipient populations are profiled below.

Karen Department of Health and Welfare (KDHW)

The Karen Department of Health and Welfare (http://kdhw.org/), directed by senior herbalist and traditional medicine advocate Hsaw Thein (profiled above), is a Karen health and advocacy group that delivers health care services, training, and programme development to refugees and IDP throughout the mid-southern Karen

region of the Thai-Burma border. KDHW maintains an administrative staff at the Thai-Burma border, and claims responsibility for the 'physical and mental health of all people living in Karen State'. KDHW was the main coordinating body for the majority of traditional health activities and clinics in Nu Poe, Umpium, Mae La camps, as well as seven districts in Karen state. Its central target population included 100,000 IDPs, who were served through 37 mobile clinics staffed by over 200 medics (in addition to BPHWT) throughout IDP areas. KDHW programmes and activities included: 1) Primary Health Care via Mobile Health Clinics and School and Environment Health, 2) Malaria Control Programmes, 3) Health Information Surveys, 4) Reproductive Health Care, 5) Trauma and Landmine Injury Management and 6) Child Nutrition.

Mae Tao Clinic

Founded by Dr. Cynthia Maung in 1989 after student uprisings, the Mae Tao Clinic (www.maetaoclinic.org) is a free clinic supported with international aid and serving a total beneficiary population of 150,000 - 200,000 (50% Thai-based migrant workers, 50% cross-border migrants/IDPs). Mae Tao, based in Mae Sot, Thailand, served as one of the main bases and conduits for organising local and international aid for Karen migrants and IDPs during my study period. Mae Tao Clinic Objectives include: 1) To provide health services for displaced Burmese populations along the Thailand-Burma border, 2) To provide initial training of health workers and subsequent corollary medical education (for example, BPHWT), 3) To strengthen health information systems along the border, 4) To improve health, knowledge, attitudes, and practices within local Burmese populations, 5) To promote

collaboration among local ethnic health organisations, 6) To strengthen networking and partnering with international health professionals and institutions.

Backpack Health Worker Teams (BPHWT)

The Backpack Healthworker (http://www.backpackteam.org/) team, based out of Mae Tao Clinic in Mae Sot, is one of the most well-funded Karen advocacy groups along the Thai-Burma border. The Back Pack Health Worker Team (BPHWT) utilises mobile health teams to provide primary (Western) medical care, maternal and child health services, and community health education and prevention programmes to internally displaced and vulnerable populations in Burma. During my study period, the BPHWT collaborated with eight major ethnic groups to manage 80 teams (289 medics) serving over 187,000 people in eastern and western Burma. Service delivery target were: 1) provision of one team of three to five health workers for every 2,000 people, 2) one Village Health Volunteer (VHV) and one Traditional Birth Attendant (TBA) for every 200 people. Community education and VHV/TBA training was a high priority for BPHWT, with the goal of local sustainability. BPHWT's top priority programmes included the Medical Care Programme (MCP), the Maternal and Child Healthcare Programme (MCHP), and the Community Health Education and Prevention Programme (CHEPP).

Karen Environmental and Social Action Network (KESAN)

KESAN (http://kesan.asia/), founded in 2001, is a non-profit organisation working alongside local communities in northern Karen State, Burma, committed to 'promoting indigenous knowledge, capabilities and gender equality while enriching livelihoods and biodiversity, raising awareness on environment and climate change, supporting community-based livelihood initiatives, and advocating for policies that

ensure people's participation.' During my study period, KESAN had an operational centre in Chiang Mai with 11 staff (4 women and 7 men), two female and two male volunteers, and a training centre in Mae Lama Luang refugee camp, Thailand. By 2011, KESAN had supported three successful traditional medicine projects in Doo The Htoo district, Karen State, with the objective of helping encourage communities, and Karen youth in particular, to learn about, preserve, and use traditional medicine.

Burma Medical Association (BMA)

The Burma Medical Association (BMA), founded in Karen State in 1991, works together with local ethnic health organisations in Burma to train health workers (including THPs) to deliver primary health care to a target population of approximately 200,000 refugees, migrants, and IDPs. Dr. Nyunt Thaung of BMA, a doctor trained in both Western and traditional medicine, was the regional coordinator for the 2001-2002 trainings in Mae Sot that catalysed the development of the Karen Traditional Medicine Network.

In the following section, I describe the role these key individuals and organisations played in the evolution of the Karen Traditional Health Network, the formalisation of the Karen traditional medicine system. Over the course of the study period, the organisations and individuals profiled above became a more formal network, and through this process not only developed and refined more targeted goals, but helped formalise and revitalise Karen traditional medicine. Also, although self-determination had always been a critical motivating and organising force for the KNU and various Karen organisations, using TRM to help meet this goal emerged as a theme and growing focus over time for this group.

Timeline and Evolutionary Phases

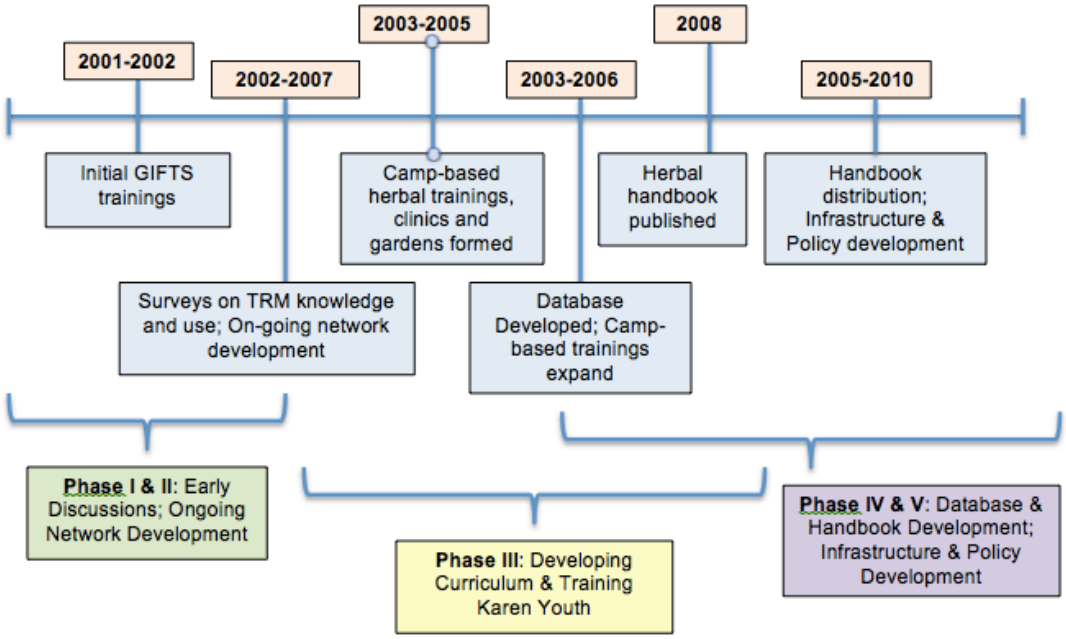

Figure 13: Karen TRM timeline and evolutionary phases.

The phases of this evolution and formalisation process as shown in Figure 13 included Phase I: Early Discussions; Phase II: Ongoing Network Development (this period also included my master's and follow-up surveys); Phase III: Developing Karen TRM Curriculum and Training Karen Youth; Phase IV: Database and Handbook Development and Distribution; and Phase V: Infrastructure and Policy Development. The final phase, 'Infrastructure and Policy Development', was a symbiotic process wherein the existing KNU infrastructure helped support and expand the emerging Karen TRM infrastructure. This included the passage and implementation of new, formal policies on TRM. Indeed, these phases were not discrete, and there was considerable overlap across activities and time periods. The ethnographic approach taken during this study allowed for investigation of the natural evolution and overlap of these phases, and each is described in the sections below.

Early Discussions and Inaugural Training

As noted above, my entry point into this research was through GIFTS of Health. GIFTS' activity along the Thai-Burma border began in early 2001 at the request of Dr. Cynthia Maung, founder of Mae Tao refugee and migrant health clinic, and Dr. Nyunt Thaung, leader of the BMA, a refugee doctors' association in Mae Sot. In late 2000, concerned that forced migrants along the Thai-Burma border had inadequate access to modern medical services and were also no longer able to utilise local medicinal plants due to conflict and forced displacement, the BMA passed a resolution calling for its members to begin documenting and strengthening traditional medicine resources along the border. These needs, and proposed solutions, were reflected in the following THP statement:

> The refugees (and migrants) in Thai Burma border cannot find or afford expensive (Western) medicines and they have to be taught on the locally available plants to treat their health related conditions, as these are affordable and also because such treatment with herbal plants can give permanent relief… and most of them (refugees/migrants) are unaware of how to use the available source.

One example of this need comes from a remote village:

> There are no car roads or bullock cart roads. It takes seven hours from Paw Kgi Kee village to Na Gyi village by foot. It then takes eight hours from Na Gyi to Bilin town by car. Whenever there is a sick villager it is very difficult for him or her to get the medicine from the town. There is no official health care programme in the village to cure the villagers… The villagers feel that traditional medicine is very important for them.

At the same time, KDHW, led by Dr. Hsaw Thein, began exploring ways to document and strengthen traditional health resources and services available along the border. GIFTS was invited by Dr. Cynthia of Mae Tao, BMA, and KDHW to assist in the coordination of these efforts. As noted above, these organisations all had a pre-existing interest in traditional medicine, but prior to 2000 were not systematically coordinating efforts across groups.

A set of large knowledge exchange sessions – or trainings – were planned, and traditional health practitioners (THPs) were contacted and brought into Mae Sot from outlying villages to participate. Three of my key informants, Hsaw Thein, Mahn Ner Lay, and Ashin Hla, played integral roles in these meetings and trainings, and a total of 40 THPs and TRM advocates participated – including but not limited to: THPs from throughout the region; clinic paramedical staff who were themselves refugees/migrants; the Backpack Healthworker team; and finally, Western medical doctors from the Mae Tao Clinic. Women's interests were also represented, with a female herbalist, trained midwife, and a coordinator from the Health Department of a local women's organisation all present.

These training meetings were lively and well attended (see Figure 14), and included extensive discussions on: collecting and preserving traditional knowledge; developing training programmes for the BPHW team and other health workers; the development of an herbal manual for health workers and community members; establishing herbal gardens and herbalist associations; and the long-term goal of active collaboration with humanitarian aid clinics along the border.

Figure 14. Traditional practitioners sharing and exchanging knowledge at 2002 trainings.

Specific health conditions and treatments discussed related to some of the most common health conditions that existed along the border: food poisoning (culturally specific illness) and vomiting; diarrhea and dysentery; HIV/AIDS; tuberculosis; malaria; wounds; and skin disease. Participants also visited the monastery of key informant Ashin Hla, to learn about the cultivation and use of rare medicinal plants. Ashin Hla, profiled in the next section, was highly regarded throughout the border region, and added valuable insight to this training programme. Following is a report from one of the THP apprentices during this visit to the monastery:

> On arriving at the monastery the group was shown a fruit so rare that although most of the participants had heard of it they had never seen it. The fruit was an extremely large variety of baelfruit. The monks were unsure as to whether it has ever been classified by taxonomists. Several other rare medicinal plant species grow in the monastery grounds…. All participants eagerly joined in collecting samples of the various species. The samples were then pressed and recorded. That night the herbalists compiled a list of the samples, giving their Burmese name, and where possible, the scientific name. This was one of the first plants to be documented for eventual input into the herbal database.

Figure 15. Ashin La and apprentice monks at his temple and treatment center.

Through this training, clinic staff learned practical skills in traditional medicine for use in refugee and fieldwork settings, as well as valuable traditional health knowledge to complement their Western training.

At the end of the session, the following priorities were named as ongoing objectives to be carried out by the THPS and NGOs involved in these inaugural 2001-2002 meetings (i.e. the original members of the Karen TRM Network): (a) plan a programme that would build a role for traditional medicine in health care in the Thai-

Burma region; (b) develop a strategy aimed at promoting the use of herbal medicine by the communities to prevent and treat both common ailments and major diseases; and (c) record and use local knowledge and resources to improve the conditions of people's lives.

Ongoing Network Development

Due to funding and security issues, the core group of herbalists and Backpack Healthworkers held two smaller meetings between 2002 and 2003, but did not hold any broad-scale meetings in Mae Sot until November 2003. The work of BPHWT had not stopped, but had shifted back to the field. A number of THPs, having established contact through these Mae Sot meetings, also continued working together in many healthcare, training, and resource development capacities – such as cultivating gardens and exchanging medicinal plant supplies, sharing curriculum ideas, and referring patients to one another. By 2003, a number of initial objectives set forth in the 2001 meetings had been met. Training programmes had developed organically throughout the border region, herbal gardens were cultivated (most notably at Nu Poe refugee camp), and the original meetings were reported to have inspired KDHW leadership to create or further develop the TRM clinics and groups in Nu Poe, Umpium and Mae La refugee camps along the border. Two Burma-based senior herbalists had also moved to form herbal clinics in Mu Traw and Pa An districts in Karen state (IDP areas).

Throughout this process, practitioners within this network voiced a desire to formalise Karen TRM knowledge and practice, and create a health infrastructure to serve border populations. This desire to preserve and formalise Karen medicine was highlighted by one training participant:

> This training will provide useful baseline information and serve as a guideline for conservation of medicinal plant resources, tribal culture, local wisdom, environmental improvement and promotion of medicinal plant knowledge and their valuable (*sic*). We have to study this before all these knowledge getting lost forever and the medicinal plants will be destroyed or extinct (*sic*).

The KDHW and BMA leaders also managed to engage local and international non-profit funders, securing funding via a combination of grant money from local and overseas-based NGO partners including the Burma Relief Center (BRC), the Burma Humanitarian Mission (BHM), the NGO Free Friendly Asia (FFA), and patient contributions.

These ongoing meetings became part of the planning and network development process that contributed to creating a more established Karen Network, and that laid the groundwork for this group's work to formalise Karen TRM.

Knowledge Preservation, Curriculum Development, and Training Karen Youth

Although healthcare delivery remained the central priority for THPs and traditional health programmes developing along the Thai-Burma border, as noted above, the focus on cultural continuation, preserving and perpetuating traditional knowledge, and training a cadre of future leaders were very strong motivations for the Karen Network. In a 2005 training workshop at Mae La, one traditional health practitioner commented on the importance of self-care and preserving traditional medicine for the Karen people:

> The Karen people also have their own traditional medicine. Many people must use plant medicine because their villages are very far from towns and hospitals. Medicine made from plants is the most practical technique because

> they can't easily find modern medicine. On the other hand, many refugees in the camps believe that modern medicine is better. They can go to clinic and get the modern tablets easily, and they believe that Karen traditions are old and not good. In some cases, modern medicine is better, but in other cases, traditional medicine may be better. Sometimes, an herbal cure is better for a common sickness, and other times a modern surgery is necessary. So it is important to be educated about both. Some people in the camps prefer to use traditional medicine. However, there are not many traditional doctors, and there aren't enough plants available for a doctor to be successful every time. There are a lot of elders who are very knowledgeable, but most of the youth aren't interested to learn. There are community members in some camps who are working to organise traditional medicine training. They want to see this valuable tradition continue into the future.

Through employing experienced practitioners in training and healthcare delivery; training Karen youth in herbalism at the camp-based herbal clinics; and then mobilising these herbalists to treat, educate, and train their communities in community- and self-care, the Karen Network worked to meet population-based needs as well as preserve Karen TRM as it faced the threat of extinction due to displacement and conflict. Below are descriptions of the camp-based and IDP area initiatives, as well as knowledge preservation efforts employed by the Karen Network during the study period.

Camp-based training programmes. Issues related to training youth and preserving traditional knowledge were discussed in all group meetings, and THPs viewed training programmes as the backbone and key to sustainability for their

various projects, as well as for the sustainability and formalisation of Karen TRM. Hsaw Thein clearly stated his priorities for all traditional health training programmes as follows: (a) to select young people from the villages and train them in the practice of herbal medicine; (b) to send them back to their villages after the training to treat the patients and to record how their knowledge is working; (c) to record their knowledge on new self-made herbal medicines; and (d) to record local knowledge that was getting lost.

The Karen Network, starting in 2001 and lasting through the study period, established training programmes and community education initiatives in Nu Poe, Umpium, Mae La and Tham Hin camps; at the monastery; at the seven herbal clinics under KDHW in IDP areas; and in KESAN's three district service areas. Formalised training programmes lasted between three months and six or more years, and the ultimate goal of all programmes was to deploy new healthcare providers and leaders into refugee, migrant, and IDP communities throughout the border region, especially to villages that had no herbalist or other health services.

Curricula and formats for these trainings varied, but the standardised training curriculum, as seen in some of the most well-established programmes such as the Nu Poe training, included: theoretical foundations of Burmese traditional medicine in the first term of four months; traditional pulse and other diagnostic procedures in the second term, lasting two months; and medical plant identification, herbal medicine preparation, and herbal medicine treatment strategies in the third term, which lasted six months and concluded in early 2004. Interest by trainees was high, and their role as apprentices within camp and IDP area TRM clinics was noted as helping to offer low-cost and culturally relevant treatment options in a setting where access to medical

care could be difficult. Below is an outline of this standardised training curriculum: (a) theory: four elements + spiritual health (based in Ayurvedic medicine of India); (b) diagnosis using traditional methods; (c) collection or cultivation of medicinal plants; (d) preparation of medicines; (e) clinical herbal practice; and (f) documentation of knowledge for future generation.

Table 10

Training Outline

Term	Period	Subject
1st Term	5/12/2002 to 30/4/2003	-The (5) Base elements. -The advantage and disadvantage of medical plants regarding on its properties to base element.
2nd Term	1/5/2003 to 30/6/2003	-Diagnosing disease in traditional way through feeling pulses at different positions.
3rd Term	1/7/2003 to 31/1/2004	-Useful common medicinal plants and application to disease -Collection of med-plants and methods of preparation herbal medicine (both theory and practical)

Note. From Nu Poe Herbal Clinic Annual Report, 2004.

As of 2004, the Nu Poe and Umpium herbal clinics and training programmes were reported to include nearly 30 staff and trainees. Students trained at clinics that were staffed on a roster basis and saw approximately 10-15 people each day (more on these clinics in Chapter VII). In order to augment the training and offer in-depth, experiential learning for the students, senior herbalists from the various training programmes maintained a medicinal plant exchange with each other and with the monks who had participated in the earliest 2001 trainings.

IDP area services. At the same time as refugee camp-based trainings were being developed, conflict and displacement continued in the IDP areas, calling for an even more intensified effort to preserve and perpetuate traditional medical knowledge, and to send new trainees in to serve these populations. According to Hsaw Thein:

> There aren't any NGOs in these (Karen) villages to give support, so the people don't have enough medicine. When the training is finished, (trainees) return back to their villages and help their people grow and use simple herbs and remedies. They are working hard to improve the lives of their people.

Programmes in IDP areas focus not only on delivering healthcare, but also on revitalising traditional health practices before they became lost in the displacement process. For example, Hsaw Thein and others often spoke of how much THPs could learn from community elders and local practices, but they were also acutely aware of how displacement and conflict was endangering these practices. As noted earlier in this chapter, families were separated from their homes, as well as from elders and THPs they know and trust, leading to a dependence on whatever aid is available – if any – in their new, temporary (and often volatile/unstable) settlements (Bodeker et al., 2005a).

For these reasons, as well as reasons related to strengthening SDM efforts, training youth in the IDP areas continued to be an important priority for the Karen Network as well. Nu Poe trained its students to teach IDP and refugee communities home health and the use of food as medicine "to educate rural populations about how to use herbal medicine and seasonal foods for preventive and curative care – to treat basic fevers and general conditions".[44]

Ongoing cultural and knowledge preservation. Preserving knowledge and tradition through connecting experienced THPs with young Karen trainees in herbalism was another vital component of all training and community education

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44 THPs and newly trained herbalists were also trained to teach communities how to identify herbal plants that possess poisonous components, as well as how to use them with caution (if at all), or how to combine them with other ingredients that offset these potentially dangerous qualities (see Lei & Bodeker, 2004).

programmes and was included in the training curriculum at Nu Poe, Umpium, and Mae La refugee camps where older, more experienced THPs were teaching young refugees with little to no prior knowledge of TRM to become leaders and caregivers for refugees and IDPs. Following is a quote from the Nu Poe Clinic Annual Report:

> We herbalists (believe) that to maintain and develop the usage of traditional herbal medicine which have been using generation after generation is our responsibility. Our best hope is if we have trained a younger generation, it would bring a lot of benefit towards communities who live in rural remote areas (*sic*).

As referenced in the camp-based training curriculum above, throughout the training and internship process, all staff and trainees were required to document and preserve TRM knowledge, and all were engaged in or encouraged to develop close relationships with local herbal practitioners, traditional healers and elders in their communities in order to learn and preserve important medicinal and cultural knowledge. Some of the reported plants and remedies gained from these communications and work with elders included treatments for malaria, diarrhea, lung infections, urinary tract infections, and gynecological diseases (Nu Poe, 2003). This knowledge was then documented, and some common remedies were added to the herbal database.

Traditional practitioners saw themselves, and their students, as guardians of their population's health and culture – as well as custodians of a free future Burma. The topic of "Westernisation" of young people in the camps and migrant setting was a main concern to many elder THPs, and was noted by a number of aid workers interviewed. As UNHCR health director Anne Burton stated, "I do believe that there

is a role within the refugee setting for traditional medicine but it has probably become less important to the (refugee camp) community over time because of the increased availability of western medicine" (Research interview notes, 2006).

Richard Berkfield, an aid worker practicing along the Thai-Burma border during the research period, witnessed an inter-generational strain when training young teachers throughout refugee camps:

> Although the youth deny it, and the elders exaggerate it, there is certainly a loss of respect towards elders as well as the Karen traditions. Students look to the outside world for education and miss out on the valuable wisdom that their elders possess. (Research fieldnotes, 2005)

According to KESAN, because of conflict and displacement, "the elders are not able to pass on their knowledge to the younger generations… The villagers do not understand the importance and ways of traditional medicine and turn to western medicine" (KESAN Annual Report, 2006). KESAN concluded that it is only through training that young people "will become human resources of traditional medicine to share and continue passing on this knowledge to future generations (*sic*)" (KESAN Annual Report, 2006).

Exposure to refugee camp systems was for many refugees their first exposure to the West, creating a micro-scenario of urbanisation and Westernisation within this contained setting. If the Karen culture and people were to survive the current conflict, and the youth not get "lost" to the West, it was believed that young leaders must continue to engage with traditional Karen knowledge and practices. Through training and practicing traditional medicine, young trainees fulfilled parallel purposes of

preserving their culture and serving some of the basic and crucial health needs of their people.

Training the next generation in indigenous knowledge, and related forest preservation, was also a key priority of KFD, and became an increasing priority for KDHW.[45] KFD policy stated:

> These practices have been passed down from generation to generation. The indigenous knowledge of forest management has never been written down. Now is the time to review the informal and unwritten practices and ensure that KNU Forest Policy is consistent with sustainable indigenous practices… The younger generations ignore traditional practices and this knowledge may be lost if it is not preserved.

Through this process of defining and formalising Karen TRM, the Karen Network sought to draw on and preserve ancient traditions while at the same time coordinate a previously loose set of traditional practitioners, clinics, and knowledge sources, to create a cohesive whole.

Database and Handbook Development

Although the Karen Network mobilised to meet many of its initial objectives directly following the initial 2001 training, one goal that had begun but remained unmet, and which continued to be a top priority, was the development of a TRM field

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45 The Karen Forestry Department agenda tended to be more publicly focused on 'indigenous knowledge and practice' issues as it was less influenced by Western influence. The main Western aid organisations focused on refugee rights and camp-based human services, including medical care, food distribution, and increasingly education – forestry was not on, or was very low on, the humanitarian radar. The Karen Health and Welfare Department, on the other hand, worked closely with Western aid organisations and presented a much more Western-influenced, biomedical approach in its public agenda. Indigenous medical knowledge was presented as a complementary, rather than central, priority in KDHW's policies and public agenda. This also stemmed from necessity as critical Western/biomedical drugs and treatments were needed for emergency and infectious disease care, and KDHW had to work closely with aid organisations to address these needs.

handbook for use by the border population. Key informant and KDHW director Hsaw Thein commented on the plan for developing such a handbook:

> We are in the field treating and teaching, and if we want to help our people for longer term we need to also document the knowledge and bring it back to share. This helps us come together, and also helps preserve this valuable knowledge. Some staff from KDHW will also go to these seven research areas and work with herbalists and also with the community for data collecting, education on herbal medicine and collecting resources from the community. Karen names of each plant, including rare herbal plants with lots of medicinal value, should be included into the database so that it would be easy to identify the plants. Also, the book needs to be described in basic language of primary healthcare and traditional medicine so that the book would be very useful for the families.

The development of these handbooks required two fundamental processes. The first was the systematic collection, review and inputting of the following information into a *centralised database*: a) medicinal plants commonly available throughout the border region, and b) safe preparation of remedies using these plants. The second process was the review, quality control, and standardisation of this information to be included into an *herbal handbook* for THP and community use throughout the region. The following sections outline these processes in detail.

Database development. The database project, coordinated by KDHW and GIFTS in close partnership with key informants Hsaw Thein, Ashin La and Mahn Ner Lay, and in consultation with camp-based herbal clinics and various members of the broader Karen Network, focused on documenting and standardising knowledge on

significant medicinal plants and their uses. The aim of creating this database was to document and preserve Karen traditional medicine knowledge, and to eventually convert this knowledge into booklets in local languages for use by THPs, BPHWs, and local village communities.

Trainees in all herbal clinics were required to record knowledge from community elders and local health practitioners. As noted in the previous section, one of the main priorities in all of the camp-based and IDP-area training programmes was the documentation and preservation of TRM knowledge.

Communities served by the Karen Network were encouraged to exchange their knowledge and learn from one another as well. Through community trainings and knowledge exchange programmes planned for all seven IDP districts, villagers taught each other how to use particular plants from their respective regions, helping those who have been displaced to negotiate and use their new environments. The Karen Network leaders documented this knowledge to be added to the database. As one THP noted, “an exchange of knowledge and plants would be very beneficial to all communities involved. Not only could more plants be used by these communities, combining the wisdom of many herbalists could lead to better treatment for many diseases”.

Data collection for the herbal database began at the first meetings in 2001, and continued through 14 meetings held between November 2003 and October 2006, involving a total of 54 traditional health practitioners. The database itself was developed using the IT facilities at the Queen Sirikit Botanical Garden (QSBG) in Chiang Mai, Thailand.

By 2006, the database included 169 species of medicinal plants commonly available throughout northwest Thailand and the border region. In total, the database included information on the preparation of 1,129 remedies using these plants for the treatment of over 150 conditions. Safe use of these plants and remedies was carefully considered and addressed, and a discussion on this topic can be found in the following section.

Figure 16. Reviewing the database with key informant and network THPs.

With respect to considerations of indigenous intellectual property rights (Bodeker, 2003), the database was prepared in partnership with refugee community representatives with full consideration given to prior informed consent on use of the material, protection of indigenous knowledge through non-disclosure of the contents of the database, and ensuring that the content and format of the database was checked with community leaders and representatives at each stage of development. Figure 17 below shows a group meeting where the database was reviewed and discussed.

Handbook development and distribution. In 2005, the GIFTS-KDHW database team joined forces with KESAN to complete the database and handbook. By

2006, approximately 80 medicinal plants were chosen, based on their common availability, general safety, and ease in preparation, to be included in this "home herbal guide" or herbal handbook (see Figures 17 and 18). The leading themes of this handbook were identified by key informants and THP authors as: (a) season and diet – i.e. nutritional recommendations depending on season, climate and other environmental factors; (b) herbal remedies, which included instructions and the safe and effective use of locally available medicinal plants for common and chronic conditions; and (c) lifestyle recommendations for preventive care.

In 2008, this knowledge was formatted and published as a field handbook for the use of local THPs, BPHWs, and community members throughout the border region. Images of the handbook covers, printed in Burmese and local Karen languages, are below.

Figure 17. Cover photo of Karen Network's Herbal Medicine Handbook in the Burmese language.

Figure 18. Cover photo of Karen Network's Herbal Medicine Handbook in the Karen language.

Following printing, 2000 handbooks were distributed to refugee and IDP families and communities along the border. Preliminary local response to the handbooks was very positive, suggesting that they would be used frequently by the local refugee, migrant, and IDP population. I was able to obtain an update from KESAN in June 2015. According to KESAN's director of food security, a division that oversees herbal medicine programming, the handbooks were serving basic and acute health needs in the IDP areas, were complementing and potentially spurring growth at the herbal clinics, and demand for the handbooks continued to be high.

> We are now on the second editing of the herbal handbook and we hope we can publish it soon. The herbal handbooks (were) distributed to the rural areas where there is no doctors or hospital, totally in the conflict zone. The feedback of this herbal handbook is many Karen people who live in the rural areas has use this herbal handbooks as health guide books treating their family with

> herbal plants when the family are sick. In addition the herbalist has been trained and we also have 4 herbal clinics in Karen state and people who are not access to the hospital will go to these herbal clinics for the treatment. Many people from the community has request for the handbooks so we must print more.

Safety issues. It is important to note that although traditional health systems provide a rich base of health knowledge, safety remains a central issue in the use and evaluation of medical interventions, especially in high-risk populations such as refugee and migrant communities. In fact, the major concern and source of debate surrounding traditional, complementary, and alternative medicine in the world forum relates to safety and efficacy of medicinal plants and traditional therapies (Shia, Noller, & Burford, 2007; Barnes, 2007). The WHO's comprehensive traditional medicine strategy, released in 2002, set its primary focus on safety and regulation issues, calling for all nations to develop national regulatory policies and to "Create a stronger evidence base on the safety, efficacy and quality of the TM/CAM products and practices" (WHO, 2002).

Safety issues, from both the traditional and Western biomedical framework, were addressed in most Karen Network group meetings held during this research study. A number of THPs were particularly focused on rectifying what they identified as false and dangerous use by communities of some medicinal plants that could act as a poison if not used correctly. One key informant highlighted:

> By recording and mentioning this knowledge in the (herbal manual for community use), the community will come to know the herbal plants with poison, and how to use them with caution, by mixing them with other plants.

> This is very important for the safe usage of poisonous plants that have great medicinal benefit. (Informant interview, 2008)

As part of this research and the collaboration with the Karen Network, THPs also requested input regarding key public health and safety information for TRM-related issues. As such, this information was added to the herbal manual for refugee and IDP use, and was related in particular to: fevers that may indicate malaria; respiratory infections and the potential misdiagnosis of TB; hepatitis B; nutrition, especially children's nutrition; and emergency obstetric care guidelines. See Appendix for a complete version of the public health safety information that was added to these handbooks.

Developing a database and herbal handbook of traditional Karen medicine served a dual purpose within the Karen TRM formalisation process. As with the youth training programmes, developing the database and handbooks helped formalise and "codify" a formerly loose set of traditional practices, allowing the Karen Network leaders to claim an independent health system. This exercise not only fortified Karen TRM as a more static ethnic resource, it also helped preserve and protect the traditions of a local population that felt its culture and existence were under attack by an oppressive regime. On the other hand, it provided a product to be delivered through its distribution channels – part of the growing TRM infrastructure being developed by the Karen Network.

Expanding a Network of Providers

To expand the reach of this network into all refugee and IDP border areas, KDHW and its partners continued to engage and collaborate with local THPs from all border areas, and to train young refuges and migrants, as well as Backpack

Healthworkers, on theory and practice of Karen TRM. This aligned with KDHW's and the Karen Network's priority to document and preserve Karen TRM, as well as train a cadre of young leaders to serve population-based health needs and become a vanguard of future leaders.

Backpack healthworkers. As described in their profile above, the BPHWT is a local, multi-ethnic organisation along the Thai-Burma border that strives to 'equip people with the skill and knowledge necessary to manage and address their own health problems while working towards sustainable development through the promotion of primary health care'. Backpack medics were generally local Burmese people who had been trained in primary Western medical care to deliver those services to isolated communities located primarily in conflict zones within Burma. While serving IDPs, BPHWs could be cut off from their base for weeks or months due to weather, conflict, and political difficulties, and could find themselves unable to provide further medical support to the communities they aimed to serve.

KDHW and Mae Tao Clinic leadership included BPHWs in the initial 2001 sessions and ongoing trainings based on the belief that with basic knowledge of local medicinal plants, BPHWs could more effectively serve these border populations. Figure 19 shows several BPHWT medics with their "backpacks".

Figure 19. Backpack health workers.

The original caption for Figure 16 reads:

> Western-funded backpack medics provide some of the only available (biomedical) care in eastern Burma. The backpack medic programme was designed to extend the reach of health services deep inside Burma to care for populations displaced by internal conflict. They replace the stationary clinics which have been destroyed when found by the Burma Army. It is a dangerous job however, as one or two are lost each year to either landmines or the Burma army. (Dang Ngo, n.d.)

IDP-area clinics and independent THPs. Throughout group and individual meetings over the course of the research period, introductions and references were made to a number of THPs working in Karen IDP areas, Karenni refugee camps, Thai border villages, as well as independently in the greater Mae Sot area. The following profiles help describe these greater THP resources available along the border. The majority of these THPs were or eventually became involved in broader Karen Network activities.

During 2004-2005, five THPs from herbal clinics and programmes within the IDP areas of northern and southern Karen state were recruited to become more involved in the Karen Network activities. These THPs stemmed from Mu Traw and Pa-An districts, as well as three unspecified IDP areas. All were invited in by Hsaw Thein, and agreed to work under the auspices of KDHW in efforts to mobilise a network of herbalists and clinics in all seven districts of Karen state. Local authorities in these seven districts had agreed to collaborate with KDHW to set up 'mobile herbal clinics', run treatment programmes, and organise centralised training workshops for local IDP communities. Similar to the design and goals of refugee-camp training programmes (i.e. Nu Poe), trainees from IDP-area centralised workshops would return to their villages to teach, treat, and document the traditional knowledge within their villages. KDHW staff, alongside these five herbalists, would be deployed regularly to supervise these trainings and the knowledge documentation process. Findings would then be shared with KDHW, including any valuable traditional knowledge shared – some of which would be added to the medicinal plants database for the herbal handbook.

This cross-border treatment, training, and knowledge sharing network, Hsaw Thein believed, was a main component in strengthening the wider Karen Traditional Health Network. It also played a critical role in improving IDP health and community development.

During a June 2006 interview, Thay Dah Soe spoke of traditional health initiatives developed in collaboration with leaders in Eh Htu Hta IDP camp in Mae Son Lai, on the Salaween River inside Burma. Some of the local leaders in Eh Htu Hta were themselves herbalists and traditional birth attendants. Recognising the need

for more locally available medical services, these herbalists and TBAs organised an herbal medicine training in Mu Traw district. Thirty participants attended the trainings, which covered the treatment of common diseases using medicinal plants and herbal remedies, including treatments for malaria, diarrhea, dysentery, respiratory infections, pregnancy-related issues, and children's health. These herbalists were invited to join the Karen Network.

On two occasions, Hsaw Thein suggested involving Thai-Karen herbalists who had visited the Nu Poe and Umpium clinics to exchange knowledge with the Karen Network leadership and camp clinic staff. All Thai-Karen THPs had Thai citizenship and were free to travel, which could have greatly enhanced the Karen Network's access to plants, supplies and materials. Ten Thai-Karen herbalists, originating from Am Po Ong Phang district in Thailand, met with Karen Network THPs during the study period, and all expressed interest in training, workshops, and knowledge activities. Further follow-up is needed to determine if collaboration was successful, but the door was opened through this initial contact.

Having described the various stages and the actors involved above, I now turn to describe the larger social and political context in which this evolution occurred.

The Role of the Larger Karen Infrastructure

The evolution of the Karen traditional medical system occurred within a larger social and political infrastructure that itself was changing. Below I describe how this infrastructure assisted in the evolution of the Karen medical system, as well as how it changed as a result of this formalisation process. As noted in the previous section, this was a symbiotic process wherein the existing Karen National Union infrastructure helped support and expand the emerging Karen traditional medical infrastructure and

vice versa. This included what I consider to be major milestones in the evolution and formalisation process: the passage and implementation of new, formal policies on TRM.

Infrastructure is generally defined as the "basic physical and organisational structures needed for the operation of a society or enterprise, or the services and facilities necessary for a system to function" (Adedamola, 2012, p. 2). It consists of a "set of interconnected structural elements that provide framework supporting an entire structure of development [in this case health]. It is important for judging a country or region's development" (Adedamola, 2012, p. 2). In this case, two of the most important regional infrastructures were those controlled by the Karen National Union (KNU) and the loose network of local and international NGOs. Below I discuss the role that the KNU infrastructure, as well as the structures and functions that came out of Karen Network activities, played in the Karen TRM evolutionary and formalisation process.

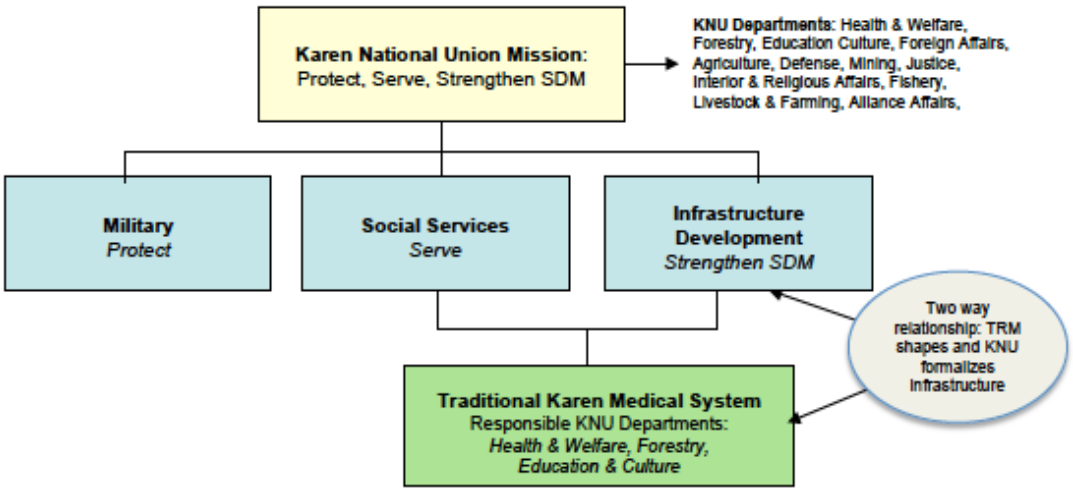

Figure 20. KNU Mission and Structure as it relates to TRM development.

This model (Figure 20) presents a new framework to explain the relationships and priorities that shaped the Karen self-determination movements (SDM) being led by the Karen National Union (KNU). In particular, it presents a proposed model on the KNU governing structure, mission, and activities. As outlined in Chapter II, the majority of existing studies on the Karen SDM focus mainly on the KNU's military and social service sectors, and place all related activities under one self-determination umbrella. The novel aspect of this model and the current research is the addition of a third, separate focus area of infrastructure development, and how it impacts the formalisation of Karen TRM.

Role of the Karen National Union (KNU). As detailed in earlier chapters, the Karen National Union (KNU) served as the de facto Karen authority, and had developed a fairly sophisticated social service infrastructure in the Karen region along the Thai-Burma border. The KNU oversaw the Karen military wing, the Karen

Liberation Army; aimed to provide 'local services and administration' to the entire Karen population of Burma through multiple social and political service departments; and held long-standing leadership positions within the Thai-based refugee camps.

A strong mandate throughout all KNU departments was to mitigate ways in which the "Burmese dictatorship is systematically trying to destroy Karen culture". The KNU departments relevant to my current study are: Health and Welfare (KDHW), Forestry, and Education and Culture. To the end of preserving Karen culture, policies and programmes promoted by these KNU departments sought to preserve and formalise indigenous knowledge, and to train young leaders to carry on and strengthen indigenous knowledge systems. This research study documented the process through which TRM was identified as one of the knowledge systems the KNU aimed to strengthen. In particular, this study documents how, through its role as a leader within the Karen Traditional Health Network, the KNU used its existing infrastructure to help formalise (and professionalise) the Karen traditional health system to create a set of services that served immediate social and health needs, and also furthered the Karen self-determination movement.

The Karen Department of Health and Welfare (KDHW). As outlined above, the KNU's KDHW accepted responsibility for the "physical and mental health of all people living in Karen State". The goals to simultaneously provide care and preserve and strengthen TRM systems by training youth were highlighted by Ashin La, a master monk practitioner practicing just inside the Thai border:

> We (master practitioners along the border) are interested in saving our traditions as it is the main health care available in the villages. We want to save the traditional knowledge that is getting lost gradually…. The young

> monk students at this temple are learning herbal knowledge to help the community… (and) my older students in Burma are both helping the community and creating their own practices (creating infrastructure).

The KDHW played a leading role in developing the Karen Network, beginning with the first sessions in 2001. KDHW director Hsaw Thein, himself a senior herbalist, was primarily interested in developing and formalising TRM resources along the border. Traditional medicine was seen by KDHW as a crucial local system (ethnic resource) that could simultaneously serve the critical health needs of the population and strengthen Karen autonomy. KDHW recognised Dr. Cynthia's efforts, through her invitation to GIFTS to help coordinate TRM resources, as an important step towards strengthening this Karen ethnic resource.

Throughout the research period, Hsaw Thein continued his role as coordinator for the majority of KDHW clinics, training programmes and practitioners in the camps and IDP areas along the mid-southern border of Karen state. When Karen Network group meetings were called in Mae Sot, Hsaw Thein and KDHW took main responsibility for bringing participants from these various border camps and areas. In this way, Hsaw Thein also became the Karen Network facilitator for this area, and remained the core connection among the group of herbalists throughout the research period. Hsaw Thein also helped manage three herbal clinics along the border, including those at Nu Poe and Umpium refugee camps, as well as the IDP area clinic known as Paw Bu Hla Hta. Moreover, he was integrally involved in traditional and primary healthcare advocacy and programme development in seven IDP areas within Karen State, Burma. Hsaw Thein stated that TRM is "affordable, culturally familiar, locally available, effective, and often produces less side effects." He explained that

perpetuating this practice "helps preserve the autonomy and identity of the Karen people."

Thay Dah Soe described KDHW's objectives for the traditional medicine network as follows:

> All the herbalists should be organised, share their knowledge and should work together well in order to promote the traditional medicine and to discover more effective and useful remedies for all conditions including malaria, leprosy and HIV…. the enemies (diseases) are everywhere but the soldiers (herbalists) are not united and are very far away from each other, working on their own without connection to help each other. It is very difficult to fight back the enemies by one soldier. If they are united as a group, they can fight back the enemies easily. That is the power of united.

This urge to unite around TRM as a shared system and resource to further KNU's agenda is a classic use of ethnicity to further a self-determination movement. The military metaphors are also fitting, and KDHW transmitted KNU's military model onto the TRM network, both in its organisation of group meetings and activities, and in its formalisation (homogenisation) of a previously mixed set of traditions and practices.

In 2005, a major milestone was reached: KDHW passed a formal policy statement, Policy #7 on Herbal Medicine, which stated: "KDHW will encourage, maintain, setup, and promote indigenous herbal remedies."

The Karen Forestry Department (KFD). The KFD was a division within the KNU infrastructure that actively supported KDHW activities, and was also called upon to support TRM programming led by KDHW. By 2007, KFD and KDHW

established three “Medicine Mountains,” which were protected herbal forest areas in Karen State used for medicinal plant cultivation, as well as for sustainable local income generation through the sale of medicinal plants. This project fell naturally in line with KFD’s policy to “empower the indigenous people, using their knowledge of forest management, their traditional way of life, and their cultural and religious practices… (including) agriculture, fishing, hunting, collecting vegetables, and picking herbal medicine” (KFD, 2011).

Dr. Nyunt Thaung, a lead representative of the BMA, initially suggested a related idea to the ‘Medicine Mountains’ during the first group meeting in 2001. He had posited that traditional medicine gardens were a crucial source of medicinal plant materials, and suggested that local residents could plant them among teak forest plots by first obtaining a licence from the Forestry Department to make the garden official. This demonstrates that the understanding of the need for shared priorities and inter-departmental cooperation was clear from the beginning of the formation of this network.

The Karen Department Education and Culture. Karen Department Education and Culture had classically been a well-developed division of the KNU that received regular funding and partnership from INGOs in the region. This was due in part to the fact that education did not carry the safety risks (both perceived and real) related to medical care, or the political implications related to the KNU departments that oversaw Foreign Affairs or Forestry which negotiated authority over political and territorial relations and boundaries. Although this division was closely linked to KDHW, because it was already well resourced, it did not play a major role in the Karen Network activities.

Policy Development Across Karen Organisations

Major milestones reached during the study period – a few of which are introduced above – included the development and/or passage by all Karen Network participants of formal priorities or policies focused on preserving and formalising TRM. The TRM policies and priorities established by these groups have been summarised in Table 11.

Table 11

Karen Traditional Health Network Participants

Karen authorities/NGOs	Key policy changes that occurred during the evolution of the Karen traditional medical system
KNU Karen Department of Health and Welfare	*Policy #7 on Herbal Medicine* (2005) states: "KDHW will encourage, maintain, setup, and promote indigenous herbal remedies." Coordinated and/or participated in majority of camp-based and IDP areas TRM efforts prior to and during research period
Mae Tao Clinic	Dr. Cynthia, concerned that villagers and IDPs within Burma have inadequate access to modern medicine, invited GIFTS of Health to help coordinate herbal medicine efforts by local ethnic organisations.
Backpack Health Worker Teams	KDHW and BMA recognised the need for a training programme to orient BPHWs to the herbal medicine used by their patients and to the herbal resources available in jungle settings in case these were needed, such as when they run out of supplies or when conflict and/or weather confine them to remote areas, sometimes for months.
Karen Environmental and Social Action Network	KESAN, partnering with KDHW and GIFTS, works with Karen health organisations and leaders to preserve Karen traditional medicinal knowledge and promote its use by empowering communities to control their own primary healthcare through the establishment of herbal forests and herbal gardens; producing traditional medicine handbooks, and establishing herbal treatment clinics and training centres.
Burma Medical Association	In 2000 BMA passed a resolution to develop knowledge of local medical plants and to provide training for health workers and herbal handbooks for local families and communities. The aim was to create knowledge of locally-available medicinal plants for use in managing common ailments, such as fevers, wounds, coughs, colds, etc.
Karen Forestry Department	Policy on indigenous knowledge: "empower the indigenous people, using their knowledge of forest management, their traditional way of life, and their cultural and religious practices… [including] agriculture, fishing, hunting, collecting vegetables, and picking herbal medicine." Policy on training the next generation in indigenous knowledge and forestry preservation: "These practices have been passed down from generation to generation. The indigenous knowledge of forest management has never been written down. Now is the time to review the informal and unwritten practices and ensure that KNU Forest Policy is consistent with sustainable indigenous practices… The younger generations ignore traditional practices and this knowledge may be lost if it is not preserved."

Role of Local and International NGOs

The KNU's status as a locally-based and internationally-recognised player within the Burmese refugee context allowed them to easily engage outside NGOs. The KNU's collaboration with well-respected institutions like the Mae Tao Clinic, whose leader, Dr. Cynthia Maung, had received multiple international humanitarian

awards, further legitimised their status. GIFTS of Health was a main partner and supporter of the Karen Network's activities, and over time, the Karen Network was also able to engage additional partners. As mentioned above, over the course of the study period, Karen Network programmes secured funding via a combination of grant money and partnerships with local and overseas-based NGO partners including the Aide Medicale Internationale (AMI), Burma Relief Center (BRC), the Burma Humanitarian Mission (BHM), and Free Friendly Asia (FFA). Detailed profiles of these NGOs and their support for the Karen Network can be found in the Appendix.

These outside organisations helped not only facilitate the organisation of group meetings and programmes, but also became catalysts in the Karen Network's process of formalising Karen traditional medicine and related health service delivery.

For example, the Nu Poe herbal clinic's initial support from AMI may have made this one of the success cases along the border. Mahn Ner Lay, also an active member of the camp's administration department (profiled above), worked regularly to foster these external relationships and develop sustainable collaborations. Although the initial support from AMI ended, Nu Poe herbal clinic staff voiced a desire for more engagement by INGOs in the future, and hoped to eventually make the clinic an integral part of the health authority structure in the camp.

Summary

As noted previously, the evolution of the Karen traditional medical system occurred within a larger social and political infrastructure. The existing KNU infrastructure, and its role as an internationally recognised player in the border region, created a framework and context within which the Karen Network could function and flourish. Each individual practitioner and each of the organisations listed above, both

the Karen and the INGO groups, not only played critical roles in catalysing and facilitating the evolution of the Karen Network and the formalisation of Karen TRM, but in the process, many of the organisations incorporated TRM into their own structures through changes in or passage of formal policies and sustainable programmes.

CHAPTER VII: SYSTEMIC IMPACT OF THE KAREN MEDICAL EVOLUTION

This chapter describes how the Karen medical evolution: (1) increased service provision to the Karen population despite the barriers it faced along the way; and (2) helped address some of the health and healthcare needs of the population. This chapter builds off the previous chapter that showed: (1) how the formalisation process produced immediate outcomes, including traditional medicine clinics, a herbal data base, a handbook, herbal gardens, and training programs and curricula; and (2) how the Karen medical system had symbiotically become embedded in the larger Karen social and political structure.

Increasing Service Provision and Access

In this section, I describe how the formalisation process resulted in the establishment and dispersion of herbal clinics in IDP areas and camps and increased the number of new trainees that went through the formal TRM training programmes and where they were trained.

Establishment of Camp-Based and IDP-Area Herbal Clinics

The Nu Poe herbal clinic will be profiled in-depth in this section, given that this clinic, training programme, and herbal garden served as a model for Karen Network herbal programmes in all other camps in the region. The description of the Nu Poe herbal clinic is followed by an overview of other clinics and programmes led by Karen Network traditional health practitioners along the border, including those at Umpium, Mae La, Mae Ra Ma Laung/Mae La Oon and Tham Hin refugee camps. As noted previously, these clinics were overseen in part by Karen Department of Health

and Welfare (KDHW), which served as a coordinating body for training, exchanges among herbalists, and servicing IDP areas.

The Nu Poe Herbal Clinic. In 1998, Mahn Ner Lay, one of my key informants, founded a traditional medical practice in Nu Poe refugee camp to address common health concerns of refugees, and with a vision to train younger generations in traditional Burmese healthcare. Through collaborations with the Karen Network and NGO partners in the region, this practice developed into an herbal clinic serving thousands of refugee cases each year.

Figure 21. Trainees at Nu Poe herbal clinic learn medicine preparation (2004).

As director of the Nu Poe herbal clinic, and with support from the Karen Network and NGO partners in the region, Mahn Ner Lay oversaw the curriculum development, cultivation of an herbal garden, and recruitment and training of young refugees and IDPs to become herbalists for their own camps and communities.

Eventually, the herbal clinic developed into a practice that served thousands of refugee cases each year. Figure 22 shows an image of the Nu Poe herbal clinic.

Figure 22. Nu Poe's herbal clinic (2004).

By 2005, there were 21 full and part-time staff members at the herbal clinic. Patient caseload averaged 8-15 inpatients and 30-40 outpatients per day. In 2003, the clinic served a total of 5,747 patients who came from within the camp, inside Burma, and from nearby Thai villages to seek care free of charge. Nu Poe clinic also housed an extensive herbal garden used to teach trainees how to identify, cultivate and prepare traditional medicines. Nu Poe worked with the Karen Network to establish the model year-long training programme discussed earlier. The training was launched in 2003, and enrolled 15 young Burmese trainees from within Nu Poe camp and from Karen State, Burma. Trainees gained practical experience by observing and aiding in the treatment of 1,170 outpatient and 222 inpatient cases

A key priority of the Nu Poe staff and trainees, or the "herbal team," as they called themselves, was the effort to serve a complementary role in partnership with camp health authorities. This meant focusing on public health education and

preventive health care in order to facilitate "co-operation and co-ordination between clinical staff (humanitarian clinics) and traditional healers in public health care service" (Nu Poe, 2003). This objective was partially achieved from 2004 to 2005 through the moral and material support (including medical supplies) that the clinic received from a Western-trained physician at AMI. Eventually, this physician actively referred patients to the herbalist clinic in cases where either: a) patients preferred herbal medicine, or b) patients were untreatable with modern medicine, such as those suffering with diabetic conditions or liver pathology arising from hepatitis or cirrhosis of the liver. The support and respect shown by this doctor, along with some of his AMI medical staff, lent great credibility to the Nu Poe herbal clinic.[46]

The structure of the clinic and its relatively unreliable, unstandardised funding sources meant that staff and trainees received little to no compensation for their work at the clinic. They reported that the act of improving healthcare and preserving traditional knowledge was a large enough reward in itself: "Although we do not receive personal uses from it, voluntarily our team members are working without despair and disheartened… With an unswerving devotion we are firmly determined to continue (sic)."

In spite of the motivation and determination of the clinic staff to persevere in their provision of treatment to the local community, the Nu Poe clinic unexpectedly found itself in crisis in 2005. This occurred when clinic leader Mahn Ner Lay was resettled to Scandinavia quite abruptly in 2005, with Aide Medicale Internationale (AMI) and camp committee support ending as a result. However, due to consistent

46 This collaboration between AMI and Nu Poe herbal clinic supports hypothesis 2 that the Karen Network's provision of TRM services complements existing humanitarian services.

patient demand, the clinic was again up and running by mid-2006 under the direction of Mahn Ner Lay's apprentice, and was staffing ten herbalists and maintaining a very large medicinal plants garden. During this period, the clinic was entirely supported by patient donations.

The Nu Poe herbal clinic's initial support from NGO partners, as well as its focus on working together with camp authorities and INGOs, may have made this one of the success cases along the border. Mahn Ner Lay, also an active member of the camp's administration department, worked regularly to foster these external relationships and develop sustainable collaborations. However, since the "friendly" AMI staff had left and the current administration no longer expressed an interest in or was supportive of collaboration, and since its director was resettled, this herbal clinic continued to depend entirely on patient donations and sporadic funding. The clinic staff voiced a desire for more engagement by INGOs in the future, and hoped to eventually become part of the health authority structure in the camp. Informant Hsaw Thein seemed to be of a similar opinion. He explained:

> If we can find a way to collaborate with the clinic doctors it will help all refugees remember that herbal medicine is a safe and accessible way to treat themselves and their families. Many young people are distracted and don't want to learn, they just want to leave for the West. If the (humanitarian) doctors can collaborate and support our work, the youth will learn and they will remember their medicine, even after these Western clinics are gone. (Research fieldnotes, 2005)

Despite the attraction of the West, the fact that Nu Poe clinic continued to practice and grow based solely on patient donations presents a strong case for local

sustainability and continuity even in the face of irregular outside support. Nu Poe provided a prime example of a functional and effective herbalist clinic within the refugee camp setting.

Other camp-based herbal clinics. The Nu Poe Herbal Clinic was not alone and similar herbal clinics were also established in five other camps at Umpium, Mae La, Mae Ra Ma Laung and Mae La Oon. Below, I briefly describe the characteristics of each.

Umpium Camp. Established in 2002 as a partner to the Nu Poe clinic, the Umpium Camp clinic was staffed 9 herbalists and support staff. By 2003, the clinic treated a total of 1253 inpatients and outpatients. It also ran a formal training programme ran from August 2003 to January 2004, following the same structure and internship requirements as the Nu Poe training

Mae Ra Ma Laung and Mae La Oon Camps. The Mae Ra Ma Laung and Mae La Oon clinics were formally established in 2003 in Mae Ra Ma Luang. Prior to 2003, that two camps ran an informal h*erbal initiative* where traditional health practitioners moved between the camps to serve both populations. By 2003, the clinic treated a total of 1253 inpatient and outpatient cases.

Mae La Camp. In 2003, there were seven herbalists who led informal herbal treatment group that the served the camp's refugee population. Referred to as the *Mae La Herbal Group*, the group's most senior traditional health practitioner conducted periodic trainings for herbalists and trainees from the camp and surrounding areas. Other group members also ran apprenticeship trainings from their individual practices. (A more detailed table of these camp clinic profiles is included in Appendix C.)

Expansion of Backpack Medics and Traditional Health Practitioners

The formal TRM training programmes described in Chapter VI produced a pool of young trainees. The distribution channels of health infrastructure were perhaps the most critical elements of that structure. Without health service delivery channels, the Karen Network would not have been able to reach and serve its population. The development of these coordinated distribution channels also served Karen Department of Health and Welfare's (KDHW) and the broader Karen Network's goals to strengthen self-determination movement structures, and to prepare for an eventual return to a pluralistic Burma (see Chapter 6). This section maps and outlines all Karen Network participants, providing the first documentation of their kind on this subject.

Summary of Expansion of Traditional Medical Resources

The map in Figure 23 shows the distribution of traditional medical resources available throughout this border region, including clinic locations, herbalist practices and the distribution of traditional practitioners. It is clear that the formalisation process resulted in programs, herbal training programs and herbal gardens are distributed on both sides of the Burma/Thailand border.

Table 12 shows that by 2005, the Karen Network had established ten herbal clinics and programs, eight herbal training programs, and two herbal gardens. Half the clinics/programs, training programs and herbal gardens were in Burma and half were in Thailand. The Karen Network had grown to more than 180 traditional health practitioners and trainees. In summary, the process of formalising Karen traditional medicine had resulted in a greater supply of trained providers over a relatively large geographic region.

Figure 23. Distribution of Karen Traditional Health Network resources in Karen State and along Thai-Burma Border.

Table 12

Summary of Traditional Medicine

District/town/camp	Herbal clinic/ program	Herbal training program	Herbal garden	Individual traditional health practitioner
Dooplaya District	2			31
Toungoo District	1	1	1	20
Papun District	1	1		30+
Pa'An District	1	1		3
Thaton District		1		
Mae La Camp	1	1		8
Umpium Camp	1	1		20+
Mae Ra Ma & Mae La Oon Camps	1			
Nu Poe Camp	1	1	1	40+
Mae Sot* (town)	1	1		27
Total	**10**	**8**	**2**	**179+**

*Program headquarters.

Challenges Facing Karen Traditional Medical Practice

The data on the development of the Karen Traditional Health Network's health infrastructure suggests there was a wealth of traditional health services available to refugees and IDPs in this region. At the same time, traditional health practitioners faced considerable constraints including lack of funding, limited access to plant and mineral materials, security obstacles and cultural or relational barriers. This section briefly examines these challenges to add a perspective of realities on the ground.

Funding. Funding is an issue common in many grassroots efforts and often creates substantial barriers to development. In their home settings, traditional practitioners in most global regions tend to rely on patient and community donations to develop and expand their practices. In the refugee setting, where income generation

is scarce, traditional health practitioners may become more reliant on outside funding and support. This was one of the main issues brought up in all group meetings observed during the research period, and was cited as the main reason that Karen Network traditional health practitioners and herbal clinics were not able to expand, work at full-capacity, or serve all health needs presented. At one point, key informant Thay Dah Soe needed to leave his work on the traditional medicine networks to work for another NGO that offered better compensation (this was only for a short time, but highlights how pressing these immediate needs are). Hsaw Thein, who had drafted a well-developed plan for running six training workshops in three IDP areas throughout 2005-2006, was forced to delay these plans when funding fell through.

Security. Security, as well as funding, was the main obstacle to building more extensive and well-managed networks along the border. The enthusiasm for creating networks and associations of herbalists dampened significantly as security issues became ever-more restrictive, dangerous, and punitive in 2005-6. All Burmese refugees were required to regularly register with the UNHCR, and the Thai security forces continued to intensify their patrolling and arrests of refugees leaving camps and IDPs attempting to cross the border or travel into Thailand.

Access to medicinal plants. Moreover, a number of obstacles to practice and programme development were listed in the Nu Poe annual report (2003):

> Large quantities of medicine are needed in the camps to treat all the patients. Many plants are also needed to make all the required medicines. The herbalists and young herbal staff have problems meeting their goals for a few reasons. One reason is concern for their safety. It is hard for the herbalists to leave the camp in order to collect plants because they have no papers, and there are

> many police. Another reason is a small budget. The small amount of funding must support the clinic, treating patients, tools for making medicine, transportation, etc. Because of these limitations, they cannot reach all their desired goals (sic).

As noted in the Nu Poe report, access to plants, minerals and supplies needed to make traditional remedies was hindered mainly by funding and security issues. For example, funding was needed to buy tools to make medicines, including grinders, pill makers, and other production and storing supplies. "Security issues," or the tight restrictions placed by Thai authorities on the movement of refugees and migrants between camps and other areas during the research period, made it increasingly difficult for THPs and trainees to leave camps to collect materials for medicines. According to Mahn Ner Lay, the herbal plants that grow naturally in the forest have more medicinal value than cultivated plants, but Nu Poe herbalists had to travel 11 km to reach these plants in the forests, and such travel was restricted by Thai police. Dr. Tin Lyaw, director of Umpium herbal clinic, had to stop practicing for 6 months at one point because Umpium's high elevation makes it hard to grow plants, but Thai authorities would not grant any permission to leave the camp, however briefly.

Culture and religion. Problems of culture and religion also affected this network's ability to expand and practice. Cultural issues affecting the collection of materials were related to practices such as slash-and-burn agriculture and a reported disregard among some refugees and villagers for jungle environments and the valuable medicinal plants they hold. As Mahn Ner Lay noted, at one time he collected all of his medicinal plants from the hills near his village, but today most plants are being destroyed or lost because local villagers are farming and burning the hills. This

phenomenon also stemmed from a distancing in some areas of villagers from their cultural and environmental ties to the land, and is often seen as a result of the need to survive in the midst of conflict (KESAN, 2006).

Another ever-present cultural challenge facing THPs in their attempts to preserve, promote and develop TRM throughout the region is the increasing Westernisation of young refugees and IDPs, in part through their interaction with humanitarian aid organisations and international NGOs. Though this is a growing concern, none of the THP leaders and trainers cited difficulty in recruiting young trainees for herbal training programmes in the camps or IDP areas, indicating a certain baseline receptivity of some youth to these opportunities.

Personality. Some of the other obstacles were to be expected among any group of leaders and groups of multi-cultural, inter-religious people – that is, clashes of ego, tensions surrounding leadership and other strained relational dynamics. Ashin Hla, arguably one of the most authoritative THPs in the area, voiced concern on two to three occasions that his knowledge was not always respected at group meetings and that it was difficult for him to engage in a mainly Christian Karen group because some of his Buddhism-based practices and beliefs were fundamentally different than those of the other practitioners. Thay Dah Soe also noted that a few of the initial network members had dropped out because they felt that their knowledge was not heard and respected at group meetings. These tensions and issues were significant. Dudley examines this phenomenon in her article on "Traditional culture and refugee welfare in north-west Thailand" (1999): "Potential cultural conflicts between refugee communities, host communities and relief agencies are of course important. Less

often recognised, however, is the importance of cultural variation and tension within the refugee community" (p. 6).

Legitimacy. The final obstacle faced by THPs in delivering care and building more sustainable programmes is met in attempts to collaborate with larger humanitarian aid or international NGO organisations (INGOs) along the border. This was another topic prominently discussed by participants throughout the research period, and may suggest potential solutions to some of these greater obstacles, such as security and funding. Components of this struggle include: attempts to gain recognition and respect from INGOs; the rapid turnover of INGO staff – leading to the imminent loss of those supportive health workers; mistrust between traditional and Western practitioners; lack of funding and time for both herbal clinic and INGO clinic staff; lack of cultural competency training and fears of medical liability among INGO staff and organisations; and a general lack of understanding among both THPs and INGOs on how these systems can work together to meet refugee needs – leading to an overlap and waste of resources in some areas.

Collaboration and local capacity and/or self-reliance programmes fostered by INGOs in this area may have the potential to absolve some of the most pressing issues facing the Karen Traditional Health Network at this time. INGOs cannot address internal cultural issues experienced by THPs (although competition for external recognition and validation can play into some of these tensions), but they may be able to address a range of issues related to funding, security and access to material.

Overcoming Barriers

Despite the many barriers, strong local leaders, the convening power of the Karen Department of Health and Welfare (KDHW) and outsiders acted as important catalysts in formalising Karen traditional medicine.

Strong leadership. One of the notable trends that emerged from this ethnography was the value of a few strong leaders in spearheading and maintaining the momentum of this work. The lack of funding, difficulties in accessing materials and supplies for medicines, and the highly prohibitive security policies along the border have in ways dampened some efforts of this group of herbalists and THPs. Yet the leadership of and community support for leaders such as Hsaw Thein, Mahn Ner Lay, Ashin Hla and Thay Dah Soe seemed to supersede some of these obstacles at times. These THPs continued throughout the research period to access the supplies and galvanise the support they needed to run their clinics and trainings, as well coordinate select INGO[47] support – efforts which kept the majority of traditional health initiatives in camps and IDP areas alive. Continuing to engage and support these leaders in the field, potentially through self-reliance and local capacity projects, may ensure that any broader-scale traditional health initiatives are well-managed and more widely accepted by the populations under study.

For example, Nu Poe's focus on working together with camp authorities and local as well as international NGOs such as GIFTS and AMI, and the strong leadership of Mahn Ner Lay, seemed to have made this clinic one of the success cases along the border. The clinic has suffered from loss of supportive INGO staff (in this

47 There are currently nearly one hundred Karen, Karenni, Mon, Pa-O political and cultural groups registered in the Thai-Burma border area (not including Shan), many of which are used as support groups or tools to organise and disseminate information on refugee advocacy issues worldwide. The Karen people, the largest ethnic minority in the Mae Sot region, number two million, supporting the Karen National Union and many influential grassroots NGOs.

case from Aide Medicale Internationale), and continued to attempt to renegotiate with these camp authorities, but even this sporadic support seemed to bolster the Nu Poe clinic, which – having established itself within the camp – was able to function on patient donations alone.

The Karen Department of Health and Welfare (KDHW). The Karen Department of Health and Welfare was a powerful ally in helping overcome some of the barriers listed above. The KDHW used its convening power to gather herbalists for the majority of group meetings during the data collection period, and became one of the main traditional health network facilitators for this area, essentially functioning as the core connection between these groups throughout this period. As described in Chapter 6, the director of KDHW, Hsaw Thein, played a major role in coordinating and leading these efforts.

The role of outsiders. Another striking trend in this research is seen in the ways that, with minimal but steady involvement and support by (local and overseas) NGO partners, these grassroots initiatives gained momentum and increased support throughout the region. Traditional health practitioners involved in the initial 2002 herbalist training programme and following group meetings seemed to strengthen their roles as partners in community health care in a more focused and organised manner in the ensuing years, demonstrating the value of supporting existing resources through collaboration, exposure and knowledge exchange. The resultant emergence of networks of herbalists sharing knowledge, planning and running camp-based and remote IDP-area clinics, and developing and running successful training programmes for younger refugees and IDPs was a grassroots response that embodied elements of

sustainability, cultural appropriateness, and community-based and managed development.

In sum, the formalisation process begun in 2002 increased the number and dispersion of trained traditional practitioners as well as access to traditional herbs in the herbal gardens. Below I examine how these changes in supply of traditional medicine began to address some of the health needs of the Karen population.

Meeting the Health Needs of the Karen Population

In this section, I describe how the formalisation process began to address some of the health and healthcare needs of the Karen population. The most common conditions treated by Karen Network traditional health practitioners are those included in Table 13. I have broken the illnesses up into: (a) priority illnesses, (b) acute and chronic illnesses typically not covered by INGO clinics; (c) illnesses related to women's health; (d) nutrition-related illnesses, (e) illnesses that have specific cultural implications; and (f) illnesses related to mental and spiritual health.

Table 13

Most Common Conditions Treated by Karen Traditional Health Practitioners (2005)

A. Priority Illnesses	B. Common illnesses typically not treated by INGO clinics	
Diphtheria	Acute	Chronic
Dysentery	Boils	Arthritis/neuritis
HIV	Constipation	Diabetes
Jaundice	Cuts/wounds	Side effects of stroke/cancer
Leprosy	Eczema	Hypertension
Malaria	Headache	High BP
Measles	Hemorrhoids	Elephantiasis
Oliguria	Piles	Kidney**
Tuberculosis	STDs	Swelling (Edema)
C. Women's health	D. Nutrition-related	E. Illnesses with specific cultural implications
Menstrual/Leucorrhea**	Malnutrition	Eye disorder
Mastitis***	Preventative care	Food/animal poison
Urinary tract infection	Anemia*	Gastric discomfort
	Beri beri*	Itching
	Diarrhea*	Skin disorder
F. Mental Health & Spiritual Illnesses		
Trauma-related		
Spiritual health disorders		

* = Illnesses that are also priority illnesses; ** = Illnesses that also have culturally specific connotations; *** = Illnesses that also are not typically treated by INGO clinics.

This list of illnesses in Table 13 reveals that, during the research period, traditional health practitioners of the Karen Network worked to address some of the priority health issues facing Burmese refugees and IDPs, particularly in the IDP areas where biomedical health services were often not available (Neumann & Bodeker, 2007; Mullany et al., 2010). Conditions included: nutrition-related illness (anemia, beri beri and diarrhea), malaria, tuberculosis, HIV, hepatitis B (including jaundice), leprosy and mental health issues (which may manifest in symptoms such as itching, some skin disorders, convulsions, gastric or digestive issues, and spiritual health).

Traditional health practitioners also treated culturally-specific diseases that had no direct biomedical translation or treatment, including eye disorders and food/animal poison. In the camp and border setting, the majority of traditional health practitioners referred acute and other serious cases to humanitarian clinics in light of the threat of multi-drug resistant strains and high mortality and morbidity rates of malaria and tuberculosis.

For more common, chronic or culturally specific health needs, traditional health practitioners sought to fill in gaps in humanitarian care, i.e. areas where humanitarian clinics were ill-equipped, understaffed, or where medical staff were not experienced or trained appropriately. For example, the two largest camp-based herbal clinics served a total caseload of over 6,700 cases in 2006, and the majority of these cases included women's health issues, nutrition, skin disease and culturally-specific health conditions, indicating a clear area of need for culturally familiar, traditional health services in an otherwise Western setting.

Below I describe in great detail how Karen traditional practitioners provided care for illnesses related to women's health, mental and spiritual disorders, nutrition and those chronic conditions that are typically not treated at INGO clinics.

Women's Health

Women are often the bearers of traditional knowledge within homes and communities (Aubel, 2006). During this researcher's 2002 pilot survey on Burmese refugee knowledge and use of traditional medicine, 42 female respondents listed over 190 traditional remedies used for common health conditions, and 13 of these women had learned this knowledge from their mother or grandmother (Pipitkul et al., 2005). Because this self and family-care tends to be based in the home, it has been reported

that Karen refugee elders prefer home-care as the first line of treatment, leading to the conclusion that women family members provided the majority of that treatment. Moreover, this researcher found that women were often uncomfortable presenting personal and reproductive health conditions at humanitarian health clinics,[48] leading them to seek treatment locally, particularly from traditional health pracitioners or clinics providing traditional medicine.

Ti Phan, a traditional health practitioner who helped run the herbal clinic in Umpium refugee camp, said in 2008 that he first referred patients to the AMI clinic, and if they came back, then he treated them. "Most patients who come to me come for women's health issues – AMI can't treat these specific diseases or women are too shy, so they come to me instead." Ti Phan had apprentices, who were primarily old women, to help with the treatment of his female patients, but once he became part of the health committee he had no more time to train anyone.

This awareness and emphasis of women's health extended to Karen Network activities. During traditional health practitioner trainings, for example, master practitioners knew to involve traditional female practitioners as per cultural norms. In their 2001 and 2002 GIFTS trainings, participants came from a wide variety of backgrounds with a great variety of experiences. Women's interests were represented, with a female herbalist, trained midwife and a coordinator from the Health Department of a local women's organisation all present. During the training, these female practitioners gave a presentation covering the treatment of amenorrhea,

48 This is not to say the humanitarian organisations are not attuned to women's needs, and in fact, Karen women's groups were some of the most active in Karen refugee camps. Also, in response to implementing programmes to support the High Commissioners Five Commitments to Refugee Women, UNHCR developed programmes in the areas of sexual and gender-based violence, which included working with its partners to create formal protocols in all refugee camps that will provide survivors and responding organisations with a response "road-map."

maternity illnesses, labour complications, post-natal uterus conditions and family planning. The group then suggested further remedies in these areas. In general, it was found that the male herbalists had less experience in these areas (GIFTS Workshop Training Report, 2001). KESAN's forestry workshops in Taung Lweh village also actively supported the training of women. For example, their medicinal group, formed in 2004, consisted of mainly women (11 of 14).

Women's health conditions were some of the most commonly treated conditions at the camp-based clinics in 2003, representing 41% (Nu Poe clinic) and 26% (Umpium clinic) of the total caseloads at these clinics. Over 400 remedies in the medicinal plants database were also related to women's health conditions. Tables 12 and 13 provide examples of how often such illnesses were treated at herbal health clinics. Table 14 below shows the main diseases treated as part of women's health cases at the Nu Poe clinic in 2003, and Table 15 outlines those diseases treated at Umpium clinic that same year.

Table 14

Nu Poe Outpatient (OPD) and Inpatient (IPD) Women's Health Cases (02/03–12/03)

Outpatient/ inpatient	Disease	Under 12 years old		Subtotal	Over 12 years old		Subtotal	Total
		M	F		M	F		
OPD	Urinary tract infection	11	6	17	245	455	700	717
OPD	Leucorrhea					301	301	301
OPD & IDP	Menstrual disorder (+17 IPD cases)					1231	1231	1231
OPD	Mastitis					2	2	2
								TOTAL = 2251
								(41% of 5,525 total cases)

Table 15

Umpium OPD and IPD Women's Health Cases (8/03–12/03)

Outpatient/ inpatient	Disease	Over 12 years old M	F	Total
OPD	Gynecological disease		215	215
OPD	Menorrhagia		3	3
IDP	Menstruation disorder		22	22
IDP	Leucorrhea		10	10
				TOTAL = 250
				(26% of 953 total cases)

According to Tin Lyaw, senior herbalist and director of Umpium herbal clinic, women's health is the main area of need unmet by INGO clinics. This need arises from culturally-specific gender issues and the comfort level felt by Burmese women visiting a largely impersonal atmosphere at some INGO clinics (Belton & Whittaker, 2007; Walsh & Hendy, 2006). The lower comfort level of Burmese women within an INGO atmosphere stems from several factors: an unfamiliarity with the medicine and methods being used, as they are biomedical and Western; unwillingness or shyness in sharing personal details with foreign (often white and male) doctors; and the degrading and disrespectful attitudes of some Western-trained Burmese medics towards their refugee patients (Dudley, 1999).

According to a technical advisor for reproductive health for the Burma Medical Association, "The biomedical approach to healing does not seem to appeal to (women) who come from rural areas of Burma, perhaps because of the tradition of health care provision by traditional health practitioners… or perhaps because of the impersonal nature of revealing personal matters to someone you may not know (at humanitarian clinics)." Perinatal issues in particular, including pregnancy, delivery

and postpartum care, were some of the most expansive and intact areas of traditional health service delivery along the border during the research period. As of 2006, KDHW, BPHWT and other local NGOs were working with over 10,000 traditional birth attendants and midwives in these areas.[49]

Based on the findings of this researcher, it is clear that women's health is one area of health care that could specifically benefit from more collaboration between TRM service providers and humanitarian aid initiatives along the Thai-Burma border.

Mental and Spiritual Health

Mental health, including emotional, psychosocial and spiritual dimensions, is another vital area of need among Karen refugees, IDPs, and migrants. According to a 2010 Center for Disease Control report, "Mental health issues (among the Karen) can be extremely complex, particularly in light of cultural differences in beliefs concerning psychological well-being and illness. Although the Karen people have words that describe what Americans would call depression and anxiety, their manifestations are not necessarily recognised as medical or mental illnesses by Karen people…Consequently, Karen persons may be less inclined to seek assistance from counselors openly offering 'mental health services' than from counselors in settings such as schools, medical centers or job placement and employment centers" (CDC, 2010).

The Burmese State Peace and Development Council (SPDC) regularly engaged in violent tactics such as torture, rape, kidnapping, forced labor and other forms of physical and mental intimidation (Allden et al., 1996) through the mid-

49 The dangerous use of "traditional" or home-based abortificants is a very serious cause of illness and death among Burmese refugee & IDP women (Belton, 2004), calling for careful, well-managed collaboration efforts in this area.

2000s, and such tactics continued to a lesser extent into 2014 (Physicians for Human Rights, 2011, 2012; Footer et al., 2014). In 2004, WHO Thailand surveyed 495 displaced persons and found a significant prevalence of trauma events experienced by this population: 7.5% had experienced murder of family or friends, 7.3% had been forced to walk on mine fields, 6.3% had serious injury due to knife/gunshot or fighting, 5.7% experienced the murder of an acquaintance, 3.2% had been kidnapped, 2.6% had an injury due to a landmine, and 2.8% had been raped (WHO Thailand, 2004).[50] A BPHWT report found that gunshot injuries, stabbings, beatings, violent detainments, and landmine injuries continued to persist in 2009, although the prevalence of such violence had diminished slightly since 2004 (Diagnosis: Critical, 2010).

A few humanitarian aid organisations currently address some post-traumatic stress disorder (PTSD) and other mental health needs in refugee camps. But in May 2006, the Committee for the Coordination of Services to Displaced Persons in Thailand (CCSDPT) and UNHCR – the main supervising bodies of aid delivery along the border – found that Thai-Burma INGOs "have sporadic and unfocused interventions addressing the psychosocial needs of the camp residents" (CCSDPT & UNHCR, 2006, p. 6), which may have negatively impacted refugees' mental health and well-being. While political developments since 2010 may have reduced the violence experienced by refugee, migrant, and IDP populations in the Burma region as of 2014, the long-term effects of psychological trauma persist and must be dealt with as part of the health care services being offered to these communities.

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50 It is important to note that self-report of rape is low among this population; actual rates may be considerably higher.

The services currently offered by INGOs are based largely on a Western model of mental health, i.e. psychological and psychiatric diagnoses and treatments. While effective in some instances, multiple studies among Asian populations have proven that this approach often fails to address some of the more somatic and spiritual aspects of these conditions (Hiegel, 1990; Gilman, Justice, Saepharn, & Charles, 1992; Mollica et al., 2002; Eisenbruch et al., 2004). In fact, the CCSDPT-UNHCR report (2006) on treatment in Burmese refugee camps recommended that psychosocial needs be met through community-based interventions "to avoid the medicalization of mental health" in the camps (p. 6). This points to an opportunity for collaboration and integration of TRM and humanitarian services in order to adequately satisfy the psychosocial needs of the population being served.

A broader look at the spiritual dimensions of health is clearly needed to accurately represent Karen perceptions of illness, treatment and cure. As described in the previous section on Traditional Karen medicine, Burmese and Karen spiritualism is based on a complex system of spirit worship. Spirit influence is believed to include possession and illness. Accordingly, traditional medical treatment methods incorporate spiritual healing and exorcism. Two categories of spirit entities were identified by 2002/2007 survey respondents as having an effect on health and illness: Nats and ghosts. There are 37 Nats – or spirit entities – represented in Burmese spiritualism. Nat shrines are placed in homes and throughout villages, and it is believed that if a family or individual is not able to worship or respect their Nats regularly, illness may ensue, in particular psychological conditions, gastro-intestinal disorders and fevers. Ghosts are held to be the souls of the departed – spirits who, due to not having had anyone to pray for them at the time of death, have been unable to

move to a non-earthly plane of existence. Karen refugees and migrants who have lost family in conflict or in the trauma of forced migration are faced with the prospect of either being possessed by a ghost, which may cause illness, or at risk of "becoming a ghost" themselves, which eventually leads to death.

The case of a 50-year-old Karen woman visiting the Mae Tao clinic in 2003 illustrates this experience:

> I know you won't believe me if I tell you what is causing my stomach pain. It is not something that Westerners can understand, and we are told by the clinic medics not to mention it. But last year I suffered from very intense stomach pain. I had a feeling that someone had cursed me because my daughter ran away with a man she was not supposed to marry. I went to the traditional spiritual doctor for a cure, and he gave me an amulet and told me what offering to make to appease our family Nats. A few days later I threw up a full banana. I believe it came through a curse, but I feel embarrassed to share this as I know Westerners don't believe or experience these things. (Research fieldnotes, 2003)

This woman's story demonstrates both the Karen belief in curses and ghosts, as well as many Karen individuals' heightened awareness, and even shame or embarrassment, regarding medical illnesses that are not acknowledged by Western medicine.

The two largest camp-based herbal clinics involved in the Karen Network, Nu Poe and Umpium, reported treating approximately 20 "mental and spiritual health" disorders (labeled as such) in one year. A deeper investigation of the various gastric, febrile and non-specific illnesses – including itching, convulsions, skin and eye disorders, and poisoning – treated at these and other herbal clinics is needed to

determine broader somatic manifestations of mental and spiritual afflictions experienced among these populations. For example, these two clinics reported treating 1,659 cases (25% of 6,700 total) of "general weakness," gastric disorders, mental disorders, tremors, numbness, non-specific skin disease such as itching, "fits,"[51] and other symptoms, many of which may have indeed related to mental or spiritual syndromes. These cases, although very real for those afflicted, would most likely have been turned away or misdiagnosed by humanitarian clinics as their facilities were not trained or equipped to deal with culturally-constructed or spiritual conditions. This psycho-spiritual dimension in traditional health care was important to the everyday lives of refugees, migrants and IDPs along the Thai-Burma border and required understanding in the management of mental as well as physical health conditions. Development of further collaborative and integrative approaches across traditional medicine and biomedical paradigms is clearly warranted.

Nutrition

The use of food as medicine was one of the strongest recurring themes in traditional health practioner discussions about patient and community health care. Malnutrition is not only a problem when suffered alone, but may also lead to dangerous comorbidity risks. For example, malnutrition may be caused by diarrhea or parasitic diseases, and malnourished patients who contract communicable diseases such as cholera, malaria and measles have much higher chances of dying.[52] These considerations are very important in some areas along the Thai-Burma border where chronic malnutrition has reached 41.2% children (WHO, 2007).

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51 The concept of "fits" – often classified as epilepsy in the West – has become a largely disputed area of healthcare for Southeast Asian refugees in the US (see Anne Fadiman's *The Spirit Catches You and You Fall Down: A Hmong Child, Her American Doctors, and the Collision of Two Cultures*, 1997).
52 Information taken from http://www.oneworldhealth.org

Nutrition is one of the main tenets of traditional Burmese and Karen medical theory, which holds nutrition to be the first line of preventive and curative care when addressing almost all health needs. Food is viewed as a form of medicine, rather than just a source of energy, and many common plant-foods are prescribed for their high vitamin and minerals value as well as their "taste," "hot-cold," and seasonal values believed to reverse certain imbalances caused by or contributing to disease. Mahn Ner Lay, director of the Nu Poe clinic, considered nutrition to be the first line of treatment for refugee and IDP patients, and designed the *preventive care* agenda of his clinic outlined below to reflect this.

At the Nu Poe Herbal Clinic, for example, traditional health providers used health education sessions to show people what they could do to prevent illness from seasonal weather changes and what they could do to prevent communicable disease using local traditions and herbs. The staff at the clinic also promoted nutrition by showing people how to choose seasonal vegetables and plants which contain rich substances for nutrition and prevention of disease, as well as how to prevent common illness due to the side effect of fruits, vegetables and plants on seasonal changes after, etc. (Nu Poe Annual Report, 2003).

Chronic Conditions Not Typically Treated at INGO Clinics

Chronic conditions such as arthritis, asthma, diabetes, benign tumors and side-effects of strokes and cancer were some of the most common chronic conditions treated at the Nu Poe and Umpium clinics, as well as by the monk Ashin La. INGO clinics were not equipped or staffed to treat these conditions (personal communication with UNHCR regional director, 2005), and referrals to Thai hospitals were very

difficult, leaving many of these cases untreated. As key informant Thay Dah Soe described:

> We feel that refugees need our services as access to hospitals and clinics is difficult from camps… refugees are not able to leave the camps for the hospitals and modern medicine clinics to get the treatment because they have neither Thai ID nor travel documents. (Informant interview, 2005)

This difficulty in transferring cases out of camp was also confirmed by UNHCR regional director Elizabeth Kirton in 2006, who noted her frustration in getting urgent care to patients in need, for patients suffering from both acute and chronic cases.

Nu Poe herbal clinic treated a number of stroke victims through physical therapy, herbal treatments and massage, and provided care to patients dealing with chronic issues such as high blood pressure, gastritis and ulcers, arthritis/neuritis, hemorrhoids and diabetes. In fact, the majority of patients visiting the monk Ashin La had been turned away from INGO and Thai clinics because their diseases were considered untreatable or incurable. Case studies observed during my research were the treatment of elephantiasis and stroke victims, all with improving outcomes within a few months of treatment. One such form of treatment used in these cases was massage and pressure point therapy, as seen in Figure 24. These findings demonstrate another area for potential collaboration between traditional health providers and humanitarian clinics.

Figure 24. Massage and pressure point therapy being conducted at Nu Poe herbal clinic.

Summary

The Karen traditional medical system, through this network of practitioners and services, offered treatments and remedies for a broad array of illnesses, many of which were either not recognised or not treated at the INGO clinics in the region. The evolution of this network and formalisation of traditional medical practice – through herbal clinics, the herbal handbook, herbal gardens, and its training programs – also resulted in an increase in the number, distribution, and knowledge of traditional health practitioners in the region. Evidence from the medical records kept at the clinics, as well as interviews with patients and providers, also suggests that these traditional health services were being well utilised by the Karen refugee and migrant population at large.

CHAPTER VIII: SUMMARY AND DISCUSSION

In this chapter, I summarise my findings and discuss their potential implications for future research, and for practical application in the fields of traditional medicine, humanitarian aid and development. I begin by returning to answer my original research questions (see Chapter I). Next I discuss the wider implications of my findings for various literatures including a) the formalisation of Karen traditional medicine, b) traditional medicine as a complement to humanitarian aid, c) traditional medicine in conflict settings, d) development theory, as well as suggested areas for additional research. I conclude with a discussion of how the findings of this case study might be applied to health and development policy as well as practice.

Research Questions

Below I summarise the answers to my three research questions. Overall, the research findings tell the story of how a network of Karen traditional medicine practitioners, under the leadership of the Karen National Union (KNU), are revitalising and professionalising Burmese traditional medicine to create a set of services that meet immediate social and health needs, while strengthening the Karen infrastructure, including furthering their self-determination movement. Although the research questions can each be answered independently, they are inherently interconnected as they attempt to describe various aspects of this evolutionary process.

Evolution of the Karen TRM system

I first asked, "How did the Karen traditional medical system evolve into a more formal medical system? Particularly, what was this process like, who was involved and what role did the various individuals and organisations play?"

This research documented how this evolution developed through various channels and processes. Over a 10-year period, a group of formerly unaffiliated practitioners came together to form a network focused on serving health needs and furthering their goals related to preserving and revitalising Karen indigenous systems, in this case Karen traditional medicine. This study found that the initiatives of the Karen Network gained momentum and increased support for traditional medicine throughout the region. The traditional health practitioners involved since the network was established in 2001 demonstrated significant growth in strengthening their role as community health partners and worked towards their goals of implementing traditional medicine programming and services in a more focused and organised manner over the years.

Regarding the formalisation of the Karen traditional medical system itself, this study found that the Karen Network formalised Karen TRM through three main practices: a) documenting knowledge of chief herbalists, b) producing field handbooks for use of medicinal plants in the region, and c) developing curriculum for Karen youth. Concrete developments out of this network and formalisation process include the formation of various new networks of herbalists sharing knowledge, organising and running camp-based and remote IDP-area clinics, creating and distributing a herbal handbook for community use throughout the border region (as

listed above), developing and running training programmes for young herbalists and community members, and cultivating medicinal plant gardens.

Role of Larger Social, Economic and Political Context

Next I asked, "How was the evolution of the Karen TRM system affected by the larger social, economic and political context in which it exists and how did it get embedded in larger social and political institutions?"

Social, economic and political context. This evolution, and the resulting formalisation of Karen traditional medicine, was shaped by the context in which it occurred. This research documented how the evolution was driven by necessity, by key players' missions, and was impacted by both outsiders and insiders. Some of the contextual dynamics that played the largest roles include conflict, culture and identity issues, and interaction with both local and international institutions and players. These three embedded levels are represented in Figure 25.

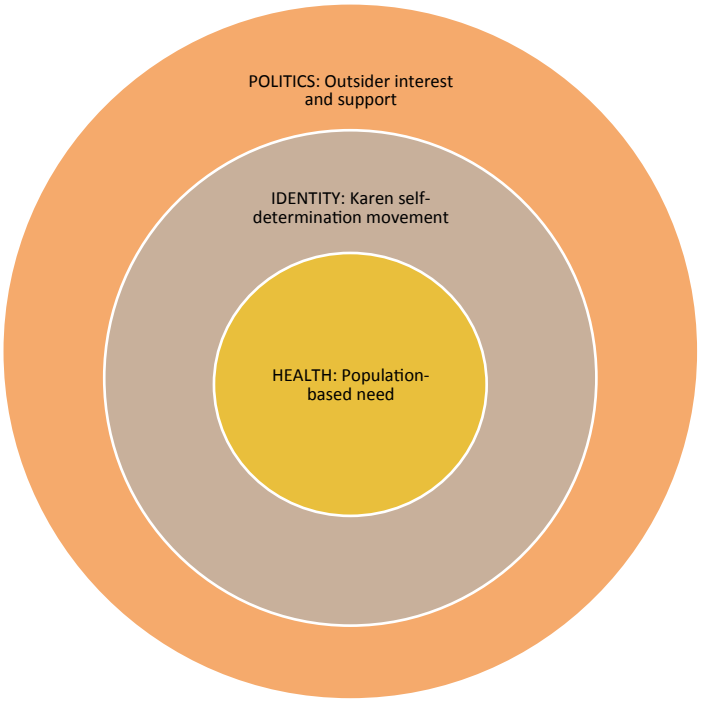

Figure 25. Social and political context of the evolution of Karen TRM system.

The primary and initial driver of this evolution was acute, population-based health needs. Conflict in the region, which forced populations to flee their homes, destroyed health facilities, and overwhelmed humanitarian aid clinics, resulted in acute, unmet needs among the border populations. This complex and growing need led the Burmese refugee and migrant population to seek all available forms of care, and drove up demand for traditional medical services. Local Karen leaders recognised this need, and in turn attempted to build an infrastructure to meet these needs.

This fed into an additional driver of this evolution: a desire among Karen people, in particular authorities like the KNU, to preserve and strengthen their culture and identity (ethnicity) as a people. As outlined in Chapter II, the Karen are a very prideful people, and receptivity among the population to continue or begin use of traditional medicine, and to learn more about these traditions for home and community use, was generally high. The motivation among Karen leaders to respond to this desire, and to preserve and formalise the Karen traditional medical system as a stable 'ethnic resource', was also very high and became the catalyst that spurred the evolution and formalisation of this network and the Karen traditional medical system.

Local and international organisations' focus on the Burmese situation played a role, and at times supported, this evolution as well. Widespread international attention on the Burma conflict over the past three decades has resulted in significant resources being made available to local, refugee-led efforts. Although traditional medicine has not received as much attention or support as sectors such as education, outside interest and interventions has resulted in increased alliances with outside groups such as AMI. This outside attention bolstered Karen organisations like the Karen National Union

(KNU) through passive, and at times active, validation – in turn helping them increase authority and exercise convening power.

A final force that supported the evolution of the Karen TRM system and network was the support and interest of local and international organisations focused specifically on traditional medicine. International organisations like GIFTS helped catalyse this network, and led the charge on database development. Other key local organisations like KESAN, which received regular international interest and support, also drove network development and were key in implementation as they were trusted by both local and international players. This helped counteract the power imbalance that arises when the overwhelming majority of outside support (in the area of health) runs exclusively through international humanitarian aid organisations (INGOs) that deliver Western biomedical services.

Together, these need-driven, identity-focused and politically-motivated forces created a fertile ecosystem for the evolution of the Karen Network and the formalisation of the Karen traditional medical system.

Symbiotic relationships. Just as the evolutionary process of formalising the Karen traditional medical system was influenced by the social and political context in which it was embedded, the evolutionary process also affected the larger context and organisation. In relation to how this evolution furthered embedded Karen traditional medicine into existing structures, and also strengthened the greater Karen infrastructure – contributing to the Karen goals for self-determination, a number of processes were observed. These included the creation and passage of formal Karen TRM policies by all network members, and the institutionalisation of training in Karen TRM at nearly all IDP and refugee camp-based clinics.

Over the course of the study period, all Karen Network organisations adopted official policies promoting formalisation of traditional medicine as a means to meet their populations' needs, but also with explicit goals of preserving and strengthening Karen identity, culture, history, and in some cases autonomy. These policies were implemented through knowledge preservation and infrastructure development activities. Activities included the teaching and promotion of traditional herbal remedies to displaced communities; the establishment of formal training programmes for mobile BPHW medics and younger generations of aspiring THPs (KDHW, BPHWT, BMA); the formalisation of Karen TRM through the creation of herbal handbooks for the local community (KDHW, Mae Tao, BMA, KESAN), and the teaching of forest preservation and management techniques to younger generations (KFD, KESAN).

Regarding infrastructure development and the institutionalisation of these policies and practices, over the course of the study period, traditional medicine training programmes – targeted at training youth - were established at Nu Poe, Umpium, Ma La and Tham Hin camps; at the monastery; at seven herbal clinics under KDHW in IDP areas; and in KESAN's three district service areas. Youth training programmes were designed to reengage Karen youth in their culture and history, and to empower them as practitioners and future leaders to serve the Karen State region – ideally within a pluralistic or democratic Burma.

Impact on the Provision of Health Services

I then asked, "How did the more formalised Karen traditional medical system become a resource for addressing health and social service needs among conflict-

affected populations (refugees, migrants, IDPs) and what role did it play in relation to existing humanitarian aid services?"

Meeting health needs. A noted above, the primary focus of Karen Traditional Health Network was meeting their populations' acute and unmet health needs. The combined target population of the Karen Network included 650,000 IDPs, migrants and refugees along the border. This study examined the traditional medical services, services provided to approximately 140,000 of these recipients, and found that practitioners were actively treating common, acute and chronic disorders (see Table in Chapter VII). During the study period, healthcare services were provided by this network through the channels mentioned above: (1) through individual practices; (2) through herbal clinics and medicinal plant gardens in refugee camps; (3) through mobile clinics in IDP areas.

These distribution channels of health infrastructures established by the Karen authorities were presented in the form of a map (see Chapter VI) that positioned all Karen Network resources geographically along the Thai-Burma border. This map illustrates the vast reach and scope of the resources being delivered by this network, and is the first of its kind to be included in any existing research.

Interface with humanitarian aid. In relation to the role it played vis-à-vis existing humanitarian aid services, my research found that Karen Network services were documented as complementing humanitarian services within refugee camps and IDP areas.

Within refugee camps, Karen Network services were documented as complementing humanitarian services by addressing unmet needs, in particular those related to certain chronic conditions, common issues such as coughs and skin

problems, women's health issues, and culturally specific disorders. These conditions were listed in the previous chapter.[53] In IDP areas, where humanitarian aid was largely unavailable, the Karen Network was documented as delivering treatment for common conditions, as well as care for critical conditions such malnutrition related illness (anemia, beri beri and diarrhea), malaria, TB, HIV, Hepatitis B (including jaundice), leprosy and mental health issues.

To ensure that traditional practices were amenable to humanitarian aid practitioners, and to THPs with a more biomedical focus, a great deal of effort was paid to document the both the safety issues as well as misuse of traditional remedies. Safety issues, from both the traditional and Western biomedical framework, were addressed in most Karen Network meetings held during the research period, and safety information was added to the herbal handbook (see Appendix).

This research provided evidence that during the research period, the Karen Network helped to address some of the acute, culturally-specific and longer-term health concerns among Karen refugees and migrants along the border. As noted by the World Health Organization, "traditional healers and birth attendants in rural and urban areas… are the vital link to supplying the needed services in their communities, and yet their efforts must continue to expand as populations grow, and health concerns continue to increase in complexity and case numbers" (Nelson-Harrison et al., 2002, p. 283). This is certainly the case when populations become displaced.

These findings indicate that a broader healthcare service network along the border may greatly benefit from more active referrals between herbal and

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53 For ease of reference these include: eczema, arthritis, elephantiasis, mastitis, asthma, eye disorders, food/animal poison, menstrual issues/leucorrhea, boils, kidney disorders, mental and spiritual health, gastric problems, colds and headache, hemorrhoids (piles), constipation, skin disorder, convulsions, cuts and wounds, hypertension, diabetes, stroke-related paralysis, itching, edema.

humanitarian clinics, particularly in light of how gender issues and spiritual beliefs affect treatment-seeking behavior and compliance.

Discussion

In this section, I address the wider implications of my findings for various literatures including a) the formalisation of Karen Traditional Medicine, b) traditional medicine as a complement to humanitarian aid, c) traditional medicine in conflict settings, d) development theory, and suggest areas for additional research. For implications and specific recommendations that traditional practitioners, Western biomedical health workers, and development specialists may want to consider, see Appendix G.

Contribution to the Literature

This study contributes to a number of literatures. First, as an ethnography, it contributes directly to our knowledge and understanding of Karen traditional medicine and the history of its formalisaton process. Second, as a case study, it provides further insights and examples of how traditional medicine can play a role in the humanitarian aid context. And finally, it provides additional understandings of the role that traditional medicine can play in conflict settings.

Formalisation of Karen traditional medicine. This study found that members of the Karen Network had established herbal clinics and formal traditional health training programmes throughout the border region. This finding contributes significant new research on the Burmese refugee healthcare context, given that no other existing studies have documented the detailed structure and organisation of Karen TRM training programmes in the area. Similar training programmes have been established in other settings, particularly in India (Ganesan, 2010; Taylor, 2007),

Zimbabwe (Waite, 2000), and Sri Lanka (Jones, 2004). In the case of India, the government incorporated Ayurvedic and Unani medical systems into national health educational programmes, and offers training in these traditional medicines at their government colleges (Bodeker, 1994). This study's findings strengthen the case that TRM can be formalised successfully in a way that is beneficial for the local community.

This study also documented the unique nature of Karen TRM and the ways in which its structure and approach both align with and differ from traditional Ayurveda and Burmese medicine. It found three main divergences: 1) Karen TRM emphasises *Bethi tea naya* above the other branches; 2) it focuses on local medicinal plants of Karen State; and 3) it seeks to codify oral traditions of Karen master practitioners. Moreover, detailed findings on the function of Karen TRM in this setting related to its four different branches were outlined, which included *Desana naya*, *Bethi tea naya*, *Netkhata veda naya*, and *Vissadara naya*. While there exists extensive research on Ayurvedic medicine and its different branches (e.g., van Hollen, 2005; Ganesan, 2010; Wujastyk & Smith, 2008) which are closely related to Burmese and Karen TRM, few studies exist on the particularities of Karen TRM (Neumann, 2003a, 2003b), and this research study is the first to enter into such a detailed exploration. As such, this study's findings on the particularities of Karen TRM, its specific approaches to treatment and healing, and the beliefs that structure its paradigm contribute the first information of its kind to existing scholarship.

Finally, this study documented detailed THP profiles of informants who were practitioners in the Karen Network. No information had been recorded on these practitioners prior to this study, and they shared valuable knowledge regarding the

networks of THPs in the region and the different issues they were facing as leaders in TRM efforts.

Traditional medicine as a complement to humanitarian aid. As noted above, this study found that the Karen Network was addressing a series of health concerns among Burmese refugees and migrants that complemented, and in some cases provided the only or best alternative, to the health services being provided by humanitarian agencies in the region.

Although basic health, nutrition, and shelter needs in Burmese refugee camps are met by INGOs and other humanitarian aid organisations including Aide Medicale Internationale (AMI), Medecins Sans Frontieres (MSF), Malteser International (MI), International Rescue Committee (IRC) and ARC International, study informants found health care delivery by these agencies to be inadequate and culturally inappropriate at times. Previous research on humanitarian aid in a refugee setting yielded similar results. The work of Harrell-Bond (2002), Almedon and Summerfield (2004), Dudley (1999), and Eisenbruch (1996) indicate that, beyond the immediate public health emergency phase, refugee livelihoods, culture and identity can be threatened by humanitarian aid workers' lack of awareness about refugees' culture and traditional health resources.

For example, both Almedon and Summerfield (2004) and Dudley (1999) document how the effects of war-induced anxiety and mental distress can be exacerbated by humanitarian interventions and refugee camp structures. In her work on Burma, Dudley notes, "increased cultural knowledge and sensitivity on the part of relief agencies can go some way towards minimizing further distress, and its negative impacts on physical and psychological health" (p. 8).

Several studies among Karenni and Burmese refugees in camps and urban centers in Thailand found that refugee anxiety, depression, post-traumatic stress disorder and loss of identity could be mitigated by access to traditional practices, social networks, and involvement in Buddhist religious groups (Allden et al., 1996; Lopes Cardozo et al., 2004). According to Lopes Cardozo et al., the positive mental health outcomes seen through community and social relations rooted in traditional knowledge systems and practices led to the conclusion that "interventions need to be largely community-based rather than health-facility based" (2004, p. 2641). The findings of both studies are further supported by the current study, demonstrating that services of various types, including individual THP practices, herbal clinics and mobile clinics work together from within a traditional health paradigm to meet the needs of this refugee, forced migrant, and IDP population.

Another situation that demonstrated the functions of traditional practitioners within a refugee aid setting was among the Cambodian refugee population in Thailand in the 1980s. Dr. J. P. Hiegel of the International Committee for the Red Cross helped Cambodian refugees in Thailand set up Traditional Medicine Centres that enabled them to maintain and continue practicing their traditional health approaches and knowledge within the refugee camps themselves. Refugees were allowed to pass freely between traditional and Western health care facilities. As of February 1983, four traditional medicine centers and 31 Kruu (traditional healers including sorcerers, monks, and women mediums) were serving nearly 3,000 patients per day (Hiegel, 1990). The circumstances of these Traditional Medicine Centres are similar to the various herbal clinics and medicinal plant gardens established by the Karen Network within the Karen refugee camps along the Thai-Burma border,

indicating further research support for the importance of such initiatives that provide refugees with access to both TRM and Western healthcare options.

Traditional medicine in conflict settings. Attempts to revitalise TRM after it has been deteriorated or largely lost due to colonialism, war, or forced migration/internal displacement have been successful in several developing nations including Vietnam (Thompson, 2003; Monnais, Thompson, & Wahlberg, 2012), Colombia (Jackson & Ramírez, 2009). Tibet (Mercer, Ager, & Ruwanpura, 2005), and Nicaragua (Castellon, 1992). For example, during the Nicaraguan civil war in the mid-1980s, different national groups began initiatives to revitalise herbal traditions in order to meet the Nicaraguan people's medical needs. The results of these initiatives equipped health workers manning remote and dangerous outposts with the herbal resources and knowledge needed to treat the severely underserved population in those areas (Castellon, 1992). In Colombia, the Yanacona indigenous people went through a complete reindigenisation process as their culture had largely been lost to the modernising forces of colonialism and post-colonialism. This study's findings support the conclusions of previous research that TRM can serve as a valuable resource for the self-determination of groups in conflict and post-colonial situations.

This study also found that significant policies were developed among all Karen organisations as a result of their participation in the Karen Network during the research period (listed above). The development of formal policies regarding TRM has been seen in other settings, including Vietnam (Trung & Bodeker, 1997). Following its war of independence from France, Vietnam established an official policy in 1954 for preserving and developing traditional medicine as a basic component of health care. This policy was expanded during the 1960s and 1970s

during the war between the North and the South in which the US and other international forces were involved. Emergency medical strategies were generated, including the development of a traditional medical programme for the treatment of burns (Trung & Bodeker, 1997). As the results of this study and others document, the formalisation of TRM through policy points directly to the use of TRM as an ethnic resource that has the potential to build upon the infrastructure of a particular group or government.

Development theory. The questions of this study were examined within an analytical framework informed by development (endogenous development), public health (primary care), and anthropology (use of ethnicity within SDMs).

Regarding the use of traditional medicine as an 'ethnic resource' that can be used to further self-determination causes, as outlined above this study builds on similar case studies from Vietnam, Colombia and Nicaragua to provide evidence that local authorities within conflict settings may use TRM to address the health needs of their populations. This specific study of the Karen Network adds an additional dimension, demonstrating that TRM, as an "ethnic resource," may be used to legitimise and bolster self-determination causes. As such, this case contributes unique insights to existing theories on the ethnic constructs of self-determination and separatist causes. That is, TRM should be added to the set of qualities and sources of identity formation used by scholars when investigating links between ethnicity and self-determination movements.

Contrary to classic development, which carries colonial legacies and is often rooted in a Western interventionist paradigm, endogenous development strives to establish alternative development systems based on a collaborative approach between

local, national and regional worldviews and actors that privileges local (indigenous) knowledge and health systems (Vásquez-Barquero, 2002; Endogenous Development, 2014). This approach was exemplified through the Karen case along the Thai-Burma border where THPs and other local organisations strove to work alongside regional and international NGOs to meet the needs of their community. Following this same line of logic, endogenous development and primary healthcare theories applied to this setting allow for a more collaborative approach to healthcare for refugee and forced migrant populations like in the Thai-Burma border setting. Rather than relying solely on a Western interventionist system, primary care draws on the most relevant locally available health system – whether Western biomedical, non-Western or both, to meet a population's health needs.

The work of Gerard Bodeker and others provides practical examples of an endogenous development framework applied to the global health context. In a 2010 article, Bodeker, Patwardhan and Shankar assert the effectiveness of TRM as a treatment method for illnesses and diseases, citing traditional Indian Ayurvedic medicine as an example, and its incorporation into formalised health systems within Indian national healthcare. Bodeker, with Patwardhan and colleagues (2010), emphasises the significant influence that TRM knowledge has had on modern biomedical knowledge, particularly Ayurvedic medical concepts that have helped Western medical researchers approach biomedical research with new understandings of the plant and biology involved in these processes. "Recent advances in environmental sciences, immunology, medical botany, and pharmacognosy have led to a new appreciation (among biomedical practitioners) for the precise descriptive nature and efficacy of many traditional taxonomies" (Patwardhan et al., 2010, p. 243).

Based on evidence from the current study, and building on frameworks proposed by experts such as Professor Bodeker, I propose a shift in the dynamic of development and humanitarian aid interventions towards a parallel or integrated approach where theorists, scientists and practitioners from both systems work from a position of respect, remaining open to the potential that each other's knowledge systems may be valid, "scientific," and global. In particular, it is important that non-Western systems like Ayurveda not be seen simply as local or ancient constructs, but as valid health systems that have had a global influence on health care, and continue to evolve to meet their populations' health needs.

Recommendations for Future Research

Despite the focused and specific nature of this study, the conclusions of this study demonstrate several areas of research within the Thai-Burma refugee setting that warrant further investigation. The primary area of future investigation that is needed is to examine how the circumstances of Karen TRM promotion and formalisation in this region may have changed, or are currently changing within the new transitional democratic context as refugees and IDPs begin to return to and/or stabilize their lives in Burma.[54] In particular, it would be valuable to investigate whether and how the TRM infrastructure developed by the Karen Network is fulfilling the Network's goal of transitioning to serve a 'pluralistic' Burma. In this same vein, research on whether and how other ethnic minority groups, such as the Mon and Shan, are picking up these practices and this revitalisation framework and

54 Despite reports of refugees and forced migrants returning to Burma and of refugee camps being slowly closed down or at least beginning to operate at a lower capacity, reports as recent as April 2014 still allege violent attacks and withheld medical services for different Burmese ethnic minorities within the country. The situation is clearly volatile.

applying it to their own populations and community health systems would expand understandings of how this model may be applied to other displaced populations.

A second area of future research is to determine the ways in which the local community is using the herbal handbooks that were produced by the Karen Network in conjunction with GIFTS and KESAN. As mentioned earlier, there were over 2,000 handbooks distributed to members of the local community in 2008 when they were first produced. Since then, no targeted research has addressed the use of these handbooks. Therefore, further research is needed to explore if and how these handbooks have been used by community members, and how they may be impacting community health, resiliency, and whether they are revitalising local health knowledge at the community level.

To that end, clinical research on traditional Burmese medicine use and treatment outcomes along the Thai-Burma border is also recommended. Although this study is informed by public health, the methodology did not allow for clinical research on health outcomes and associated benefits and risks. Therefore, clinical public health research is recommended on the potential health benefits of TRM use among this population, including physical and mental health outcomes, improvements in community health, and increased awareness about how to treat non-acute conditions with common and locally-available ingredients. This type of clinical research would also include an investigation of risks including potential misdiagnoses by TRM practitioners, health impacts of delayed treatment seeking behaviors due to use of TRM, adverse affects associated with patients combining traditional and modern medicine, and misuse of traditional medicines by community members attempting to self-treat with the use of herbal handbooks.

Finally, additional research is also recommended on the subject of direct collaboration between Western humanitarian aid practitioners and traditional health practitioners who deliver traditional Karen medicine. While the instances of direct collaboration remained sparse during the research period for this study, it is possible that the situation has changed and that the continued formalisation of TRM in the region has opened up new opportunities for collaboration with regional and international NGOs and humanitarian agencies. Moreover, there were many humanitarian organisations that due to time and access limitations were not included in this study, and it would therefore be beneficial to incorporate some of those organisations into future research in order to determine if they are involved in any collaborative initiatives involving TRM or other traditional practices or resources in the area.

Although a number of follow up studies are warranted on the Thai-Burma border situation, it is useful to note that this research has already made an impact at a global level. Through the 2005 and 2012 Bodeker and Neumann publications and associated lectures, this work has spawned a new approach that refugee health practitioners are putting into practice in the field (Singer & Adams, 2011). Singer and Adams, who run Foundation House, a leading torture and trauma rehabilitation service in Melbourne, Australia, shared that they had modeled their integrated refugee health program after our work on the Thai-Burma border. This program offers counselling and complementary therapies in an integrated manner to Karen, Somali and Afghan women refugees. These women, who had presented as deeply withdrawn, opened up and began to recover and reengage with their communities and host settings. Some even engaged their family members in cultivating and using remedies

from an herbal garden that was planted at the centre. Although the current study is specific to the Karen setting, this Foundation House example demonstrates this study's potential to inform refugee healthcare delivery practices more broadly.

Conclusions

Since I began this research in 2003, the nature and scale of forced migration has changed in significant ways. Current patterns of humanitarian crises include civil war and mass violence – motivated and at times exacerbated by the use of social media, large-scale natural disasters linked to climate change, a rise in protracted emergencies, and increasing correlations between chronic poverty and vulnerability to risk (GHA 2014). Response to humanitarian crises in 2013 reached a record US$22 billion in spending – a steep increase from 2012; and the number of internally displaced people reached an unprecedented 33.3 million, while the number of refugees increased to 16.7 million (GHA, 2014).

Resources to assist these populations are limited, and it is imperative that we rethink our interventionist approach to humanitarian aid and development. As Monsutti (2008) calls for in his analyses and recommendations, increased pressure on the classic humanitarian system requires us to explore displacement not just as a disaster, but as an opportunity. Large multilateral organisations including UNHCR, World Bank and the European Commission are taking note, and through this new lens development and humanitarian practitioners are encouraged see displaced populations as productive actors and potential creative agents of change. We are encouraged engage with local leaders, as Bodeker proposes, through a parallel or integrated approach.

This study offers an in-depth analysis of the ways in which the leaders of one displaced population are acting as entrepreneurs and agents of change, and demonstrates their potential as partners – and leaders – in the development process. Through the lens of endogenous development this case demonstrates the value and role a non-Western system such as Burmese traditional medicine (and its leaders) can play within the "humanitarian-development nexus" – challenging humanitarian and development health authorities to engage with these systems from a radical but transformative new approach: collaboration. Indeed, if development agencies were to embody the endogenous development approach fully, where possible they would adopt a role of support not just collaboration, looking to local health authorities to shape and *lead* interventions.[55]

This suggests a need for further reflection among humanitarian and development practitioners about assumptions they make regarding the credibility and authority held by 'local' leaders. For example, is it the perceived risk associated with traditional medicine or a more hidden set of prejudgments about local authorities' capacity that informed aid agencies' attitudes towards traditional health resources along the Thai-Burma border? How prevalent are the legacies of colonialism in the international health context?

Beyond the evident implications for development and humanitarian aid theory and practice, as Burma moves towards democracy and populations begin returning home, this case may also influence post-conflict reintegration and development. On a local level, the Karen Network's model for developing a functioning TRM health

[55] For implications and specific recommendations that traditional practitioners, Western biomedical health workers, and development specialists may want to consider, see Appendix G.

infrastructure may help guide other Burmese ethnic minority groups, such as the Mon and Shan, as they seek to rebuild, stabilise and serve their communities post conflict. On a national and regional level, if and when Burmese-Karen relations normalise, Karen Network leaders may be able to inform national and regional efforts to shape the future of Burma/Myanmar's national healthcare system at home and abroad. Indeed, recent reports indicate that ASEAN, of which Burma/Myanmar is a member, is moving to "harmonise" traditional medicine across member states. According to meetings between Bodeker, the Chairman of the Myanmar Medicine Council and the Director of Traditional Medicine for Lower Myanmar, Myanmar is an active player in this process. If Karen authorities are able to join this dialogue, they can contribute their formalised products (training curriculum, herbal handbook) to this harmonisation process, as well as share lessons learned on how revivalist movements can result in the preservation of compromised traditional health systems.

By seizing the 'opportunity of displacement' to develop a functioning TRM health infrastructure, Karen authorities have become productive actors in the displacement context; and if they are able to apply this to regional alliances like ASEAN, they have the potential to play a role in shaping the future of Burmese medicine writ large, as well as in proactive collaborations among world medical systems. Humanitarian and development authorities would be remiss to continue to neglect the unharnessed potential of traditional medical systems such as Karen traditional medicine to impact local and global health systems and outcomes worldwide.

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APPENDIX A: INTERVIEW SCHEDULE AND TOPICS

See also Chapter III for more detailed question outline.

Interview Schedule

- Concentration and service areas of THPs in camps and settlements
- Communication and shared practice among healers of different areas
- Characteristics of each practice: refugee health issues being met, including physical and psychospiritual needs, as well as serving needs unmet by humanitarian organisations
- Development of clinics and services in the border area, including grassroots clinics, training programmes, herbal gardens, etc.
- Security and conflict barriers to practice and collaboration
- Interaction with outside structures (INGOs, researchers, Thai authorities) and how this helps and/or hinders practice
- Potential for and interest in collaboration between refugee and humanitarian NGOs

Refugee-health related interview topics:

- Profile of patients
- Common ailments: which are common/expected, and which are related to conflict and displacement
- Treatment protocols for a range of conditions

APPENDIX B: PROFILES OF KAREN TRADITIONAL HEALTH NETWORK PARTICIPANTS

NOTE: Pseudonyms were used for all THPs.

Key informants

The five key informants involved in my research stem from three Karen refugee camps and one Thai village along the Karen State-Thailand border area (mid-southern part of the border). Three are Christian, one Roman Catholic and one Buddhist, but all are Karen, and all are refugees or migrants fleeing oppression in Burma. These informants' training and experience in traditional medicine range from 15-35 years, and all but one are senior herbalists or master practitioners. With the exception of one, a monk who remains very stable at his temple, all of these key informants were fairly mobile and actively engaged in health and traditional medicine advocacy beyond their own camps and well into the IDP areas. Because of their diverse backgrounds, these key informants allowed me to gain an overview of traditional health resources throughout the Karen camps and areas, and helped me gain access (through snowball sampling) to a large number (n = 116) and variety of traditional health workers and resources along the border. Sampling was also facilitated through local and overseas NGOs focused on traditional health.

Two of my key informants are top **Karen Department of Health and Welfare** (KDHW) staff. The Karen Department of Health and Welfare is a refugee advocacy group that provides health services to refugees, migrants and IDPs along the border. Its headquarters office is based in Mae Sot, and their main target population is the IDP population within Burma, as this population suffers from intensified conflict and the majority is cut off from all health services through displacement, conflict or forced destruction of any available health infrastructures. The exact scope and mandate of KDHW is very secretive, as they are viewed to be one of the SPDC's main enemies. Anyone supplying aid to 'insurgent' ethnic minorities is considered an enemy of the state.

Hsaw Thein, Director of KDHW and senior herbalist, did not train formally at Burmese traditional medicine institutions, but studied Herbalism through family heritage, interaction and practice in villages within Burma. HP is the coordinator of the three herbal clinics along the southern Thai-Burma border: the refugee camp clinics at No Poe and Umpium, as well as the IDP area clinic known as Paw Bu Hla Hta. Hsaw Thein's primary focus is on coordinating and overseeing the efforts of these clinics and all Karen border herbalists in this region. He is also very invested in documenting and strengthening traditional medicine knowledge, as well as training new health leaders throughout all Burmese refugee and IDP areas. According to Hsaw Thein, this medicine is affordable, culturally familiar, locally available, effective, and often produces less side effects. Perpetuating this practice also helps preserve the autonomy and identity of the Karen people. Hsaw Thein has named his main priorities:

1. Select young people from Burmese villages to train in traditional medicine
2. Place these young graduates back in their villages as practicing herbalists

3. Ask herbalists to record their own and their communities' herbal knowledge for future practice, training and research, and in order to preserve knowledge that may die out as master practitioners pass away

Hsaw Thein spends the majority of his time on health advocacy and programme development, with TRM leading as one of the top priorities. He has also been one of the trainers at the Nu Poe herbal clinic. His service area includes seven districts within Karen State, Burma. He works together with clinics inside Nu Poe and other camps but works mainly in these seven regions – serving as a consultant and leader in the area of IDP healthcare. When group meetings are called in Mae Sot, Hsaw Thein and KDHW take main responsibility for bringing participants from the various border areas. In some of our recent meetings, Hsaw Thein also brought herbalists from northern border areas, and noted that he is attempting to reach into these areas as well. Before becoming director of KDHW, Hsaw Thein worked throughout Karen state for KNU. During this time he became very familiar with all areas of Karen state, but is now more focused on the southern areas as he is based in Mae La and has easier access to these areas (for this reason he is currently negotiating with KESAN about collaborating on larger projects).

Hsaw Thein also acts as a spokesperson between these herbal clinics and INGOs in their respective camps, so there is a communal effort between these various THPs and resources. One of Hsaw Thein's, and indeed KDHW's main objectives, is in building alliances with Western aid organisations in an 'integrative' setting.

Thay Dah Soe, KDHW Office Manager, herbalist, and my main contact person at KDHW, studied Herbalism through interaction and practice in villages within Burma. Thay Dah Soe has spent over 20 years travelling through border villages acting as herbalist and primary care provider, relying on both traditional medicine texts and Western public health guides (ie 'Where There is No Doctor') to serve villages without established herbalists or clinics. Today, Thay Dah Soe continues to spend the majority of his time travelling and serving IDP populations with primary Western and herbal care. His main priorities and goals for present and future TRM advocacy work, as voiced in our meetings and interviews, includes enhancing traditional medicine education in refugee camps and border villages, as well as mobilising networks of THPs to work together. One of his main metaphors is that THPs are an army and traditional medicine is their ammunition which should be used to wipe out disease, the enemy. According to Thay Dah Soe this can only be done by building networks and working together (described by Thay Dah Soe as the 'power of the united').

According to Thay Dah Soe, his own and KDHW's programmatic priorities are: 1) recruiting experience health personnel to provide healthcare and training services along the border, 2) training young and interested men and women in healthcare, 3) delivering clinical care to refugees and IDPs along the border, 4) promoting preventive care among IDP and refugee communities (ie nutrition and sanitation) and 5) veterinary medicine. Hsaw Thein and Thay Dah Soe are also both main proponents and contributors to the development of an herbal manual for community use.

Another key informant is Ashin Hla, abbot of a monastery in Wai Kla village, approximately 10km outside of Mae Sot. Ashin Hla is a master practitioner, and possessed the highest level of traditional medicine knowledge within my research

group. He is also highly regarded by refugees, IDPs and local health leaders throughout the border region. Ashin Hla became a monk as a young boy, and began studying and practicing herbal medicine at age 18, which was passed down to him through many generations of his family. He has been practicing for 34 years – 24 of those in Thailand after fleeing Burma's oppressive policies. He settled in this small Thai-Karen border village as there was no temple in the area, and has been practicing as a monk and healer ever since.

Most of the Thai and Burmese patients (Burmese are mostly of the Karen ethnic minority – those fleeing persecution by the Burmese government) come to see Ashin Hla after seeking care in hospitals and being turned away because their conditions are too chronic, severe or 'incurable.' Over the years, Ashin Hla built a large 'clinic' at his temple, constructing three buildings for patients and their families to stay while they received treatment, at one point treating and housing nearly 100 patients at a time. But about two years ago local villagers began complaining that 'this is a temple, not a hospital,' so at their request he now houses a maximum of five patients at a time and attempts to visit some patients in their homes, though as a monk this is not common policy. Ashin Hla was the main contributor to the field manual for refugee health, and a number of his treatment strategies are detailed in the *Refugee & IDP health* section below.

Mahn Ner Lay, another key informant, is the director and senior herbalist at the herbal clinic at Nu Poe refugee camp. He is also an active member of the camp's administration department (Karen Refugee Committee). Mahn Ner Lay is Karen, 45 years old, Roman Catholic and able to speak Burmese and two different Karen languages. He gained his traditional medicine knowledge from his grandfather while growing up in Burma, and continued to strengthen it through training within communities, through the study of Burmese traditional medical texts, and through his own practice. He regularly records and refines his knowledge based on clinical outcomes. (Note: Mahn Ner Lay has since been resettled to Norway, and the practice continues to be run by his apprentices and colleagues.)

As director of the Nu Poe clinic, Mahn Ner Lay oversaw the curriculum development, recruitment of young trainees from within the camp and from eight IDP areas, cultivation of an herbal garden, and the training of over 30 young refugees and IDPs to become herbalists for their own camps and communities. Mahn Ner Lay's main priority was training young men and women to become herbalists and leaders, but he was also very focused on community education, in particular related to nutrition – in his experience, most fever and common conditions were related to food and season. He envisioned the herbal clinic as playing a complementary and preventive role within the greater public health agenda at the camp, repeatedly encouraging and welcoming input and collaboration from larger INGO health authorities. Mahn Ner Lay was another one of the main proponents in the development of an herbal manual for community use.

Hti Shaw Lay is the staff director of the herbal clinic at Umpium refugee camp, and as well as an active herbalist and coordinator at the Paw Bu Hla Hta IDP clinic. Hti Shaw Lay was one of the first herbalists I interacted with in this area when I witnessed his work in 2002 at the Mae Tao clinic. In this small, single case example, the medical director of the outpatient department at Mae Tao Clinic requested a trial intervention to help a young AIDS orphan suffering from chronic HIV-related fever and other complications, as he was not responding to conventional medication.

Herbalists involved in the original herbalist training programme (through GIFTS) discussed the case and decided to choose Hti Shaw Lay, a senior and experienced herbalist, to treat and oversee this case. Within several weeks, the child's fever had gone, an enlarged liver had returned to normal size and new complications that developed were managed with ongoing success. Subsequently, through lack of funding to support his service, the herbalist was unable to commute from a rural area. Later, thanks to voluntary contributions from Mae Tao Clinic expatriate staff, the child was put on a course of anti-retrovirals and is maintaining a stable state of health. Hti Shaw Lay's work continues as staff director at the herbal clinic in Umpium camp where his main priorities are treatment, documenting traditional medicine knowledge, and training young staff in herbal medicine.

Through regular meetings and interaction with these key informants from varied backgrounds and areas along the border, I was able to gain an overview of the resources available in each THP's respective region. These informants then helped me gain access to THPs and health workers in almost all Karen refugee camps and many IDP areas along the border. These resources included individual practices, herbal gardens, herbalist training programmes, community development projects and most prominently, traditional medicine, more commonly referred to as 'herbal' clinics in refugee camps and border areas.

In-depth semi-structured interviews

My data also includes in-depth, semi-structured interviews conducted through primary or second-hand interviews. Five of these informants were main players in the traditional medicine programmes and clinics at Nu Poe, Umpium, Mae Ra Ma Laung/Mae La Oon and Tham Hin camps. Dr. Tin Lyaw is the director of Umpium herbal clinic and has been practicing traditional medicine for approximately 30 years. Paw Gay, a traditional midwife at Umpiem camp, is also a member of the Karen Education & Women's Department, and helps run a group of traditional birth attendants and midwives providing services at Umpium camp.

Saw Htoo Ma, trained under Nu Poe herbal clinic director Mahn Ner Lay for over 10 years, was the clinic's assistant director until earlier this year when Mahn Ner Lay was resettled. Saw Htoo Ma is now acting director of the clinic. Since 2004, Thar Lin has been providing care to refugees in Mae Ra Ma Laung and Mae La Oon camps, and was recently invited to continue practicing and teaching at Mae La camp. From Tham Hin camp, interviews and observations were made with the coordinator of the traditional medicine education and service programme. Details from these interviews, and more information on all of these THPs, are incorporated throughout this chapter.

I also had the opportunity to interview U Kara, a monk and apprentice under abbot and master practitioner Ashin Hla. U Kara has been a monk for eight years and is currently training because he hopes to become a health, education and religious leader for his community upon his return to Karen State. U Kara's feedback helped define why Karen youth are seeking training in traditional medicine.

These in-depth interview participants also include three interviews conducted with independent THPs during my master's research (2002).[56] I am incorporating this

56 Ethical procedures of design and informed consent for this study approved by Columbia University School of Public Health in 2002.

data into my current analysis as it lends perspective on how THPs are working alone – outside of networks, as well as their interest in becoming involved in the greater network of the region. The first THP, Dr. Seyaing, stems from one of the 'warrior' traditions of the Karen people and trained under his father as well as a very renowned monk of his region. His practice was strong when he was young, but since fighting began and his land was confiscated by the SPDC, he has had to drop his practice in order to work and make money for survival. Dr. Seyaing provides an example of what may be happening to many valuable THPs attempting to practice in the SPDC conflict zones. He was very eager to join the Karen Traditional Health Network, but lost contact over the following year.

Two independent THPs practicing within Mae Sot include a Muslim THP, Ne Yaing, and a traditional Karen masseuse and herbalist. Ne Yaing was a master practitioner with over 40 years of training, who ran a small clinic on the edge of Mae Sot. The masseuse-herbalist had moved to Mae Sot to build her practice because she said there is so much traditional health knowledge around her home villages that she felt it necessary to come to a displaced community where her services would be more needed. These cases show the incentive of some THPs to relocate their services to meet their populations' needs. These THPs also voiced interest in joining the greater network under investigation.

Group participants

Feedback from approximately 40 THPs, healthworkers and staff involved in traditional health services along the border was gathered during a series of 14 group meetings held in the Mae Sot and Chiang Mai regions. The first of these meetings were convened by GIFTS of Health in 2001-2002, and the remainder were held during my research period in 2005-2006.

*Group interview participants**

ID		Position	Affiliation	Base
1.	KN	Director	Burma Medical Association	Mae Sot
2.	MMT	Senior trainer	Mae La herbal clinic	Mae La camp
3.	UAPS	Herbalist	Mae La herbal clinic	Mae La camp
4.	PMK	Herbalist	Mae La herbal clinic	Mae La camp
5.	SET	Herbalist	Mae La herbal clinic	Mae La camp
6.	NS	Alchemist	Mae La herbal clinic	Mae La camp
7.	SW	Alchemist	Mae La herbal clinic	Mae La camp
8.	HRM	Assistant director	Nu Poe herbal clinic	Nu Poe camp
9.	MN	Jungle herbalist	Independent (?)	Nu Poe camp
10.	NTN	Herbalist	Independent	Nu Poe camp
11.	ET	Assistant director	Umpium herbal clinic	Umpium camp
12.	TK	Herbalist	Umpium herbal clinic	Umpium camp
13.	H/TS	Medical director	BPHWT	Mae Sot
14.	SWR	Herbalist in-charge	BPHWT	Mae Sot
15.	EKSO	Administrator	BPHWT	Mae Sot
16.	EN	TBA	Independent	Mae Sot/Mae La
17.	SWSN	Monk and herbalist	Mae Sot monastery	Mae Sot
18.	LH	Director of herbal programme	Herbal programme	Mu Traw, N. Burma
19.	HE	Director of herbal programme	Herbal programme	Pa An, Burma
20.	SMA	Herbalist & director	S. border herbal clinic	Burma
21.	SSTR	Herbalist	S. border herbal clinic	Burma
22.	ND	Herbalist	N. border herbal clinic	Burma
23.	*NA*	Female herbalist	*NA*	*NA*
24.	*NA*	Trained midwife	*NA*	*NA*

*Group participants also include approximately 15 healthworkers and staff from local Karen health departments and programmes, including the Backpack Healthworker Training programme (BPHWT), which is based in Mae Sot.

The main topics discussed and activities pursued during group meetings include: defining where resources and services exist along the border; the structure, logistics and curricula of training programmes; defining the best methods for deploying young herbalists into camps, border villages and IDP areas; strategies for developing networks, such as a once/month knowledge exchange sessions and development of herbalist associations; the on-going collection, documentation and preservation of TRM knowledge; compiling a medicinal plants database for production of herbal manuals for villages; IPR issues; the cultivation of herbal gardens and rare species; and long-term goals of clinical integration and/or collaboration with INGOs working along the border. At every meeting, practitioners also presented their experiences and

shared knowledge on treatments for a variety of common and chronic diseases. These themes will be addressed again throughout this chapter.

NGO partners

The traditional medicine practices, clinics and programmes profiled in my research have all been established and developed independently or through a combination of grassroots initiatives and NGO interest and support. The NGOs involved in traditional health along the border are both locally (mainly Karen) and overseas based, but all are focused specifically on local needs, capacity building, and full-partnerships with the THPs involved. Hence these are not 'INGOs' or humanitarian aid organisations in the classic sense, although they are all conducting aid work in some form along the border. These 'NGO-partners', as I will refer to them, include: the Global Initiative for Traditional Systems of Health (GIFTS), Karen Department of Health and Welfare (KDHW), Backpack Healthworker (BPHW) team, Burma Medical Association (BMA), Burma Relief Center (BRC), Burma Humanitarian Mission (BHM), Free-Friendly Asia (FFA), Karen Environmental and Social Action Network (KESAN), and the Drug and Alcohol Recovery and Education Programme (DARE).

One of the main functions of these NGO partners has been supporting and bolstering existing THPs and traditional health resources through programme development, funding for clinics and training programmes, and facilitating network development through centralised meetings in camp or town centers. The most striking outcome of this NGO support has been the longer-term and more sustainable establishment of larger THP networks and resources. Essentially, all these THPs seem to require is an initial spark of funding, interest or validation by these established organisations to propel them into action and more sustainable programme development.

I will expand on all of these organisations through contrasting and comparing them to larger INGOs in the Chapter IV on collaboration, but all are also relevant to the development of traditional medicine networks in this region, so I will briefly profile them now.

Global Initiative for Traditional Systems of Health (GIFTS), Karen Department of Health and Welfare (KDHW), Backpack Healthworker Team (BPHW) & Burma Medical Association (BMA)

In 2001, key refugee medical personnel in the Mae Sot region invited a group of local and overseas NGOs to design a training programme to orient refugee & IDP health workers to the herbal medicine used by their patients. These trainings, held in 2001 and 2002, were organised and held jointly by KDHW, the Backpack Healthworker (BPHW) team & the Mae Tao Clinic in Mae Sot; the Burma Medical Association (BMA) and GIFTS of Health, Oxford, UK; with support from the Burma Refugee Care Project (now Planet Care www.planetcare.org).

Global Initiative for Traditional Systems (GIFTS) of Health, is a UK-based NGO that conducts research, programme and policy initiatives on traditional health systems worldwide (www.giftsofhealth.org). GIFTS became involved in this region

during an investigation of traditional health practices in the region in 2000 (?). GIFTS is chaired by Dr. Gerry Bodeker, through whom I became involved in this region during my master's research in 2002.

The *Karen Department of Health and Welfare (KDHW)*, directed by senior herbalist and traditional medicine advocate, Hsaw Thein (profiled above) is a Karen health and advocacy group that delivers health care services, training and programme development to refugees and IDP throughout the mid-southern Karen region of the Thai-Burma border. KDHW is the main coordinating body for the majority of traditional health activities and clinics in Nu Poe, Umpium, Mae La camps, as well as seven districts in Karen state.

The *Backpack Healthworker (BPHW)* team, based out of Mae Tao Clinic in Mae Sot, is one of the most well-funded Karen advocacy groups along the Thai-Burma border. There are currently 70-100 backpack healthworkers who are deployed into the hills of Burma to treat underserved IDPs with 'essential' Western medicines (trainings are held every six months). The BPHW team also aims to augment these services with complementary sources of herbal medicine.

The *Burma Medical Association (BMA)*, founded in Karen State in 1991, works together with local ethnic health organisations in Burma to train health workers (including THPs) to deliver primary health care to a target population of approximately 200,000 refugee, migrants and IDPs. Dr. Nyunt Thaung of BMA, a doctor trained in both Western and traditional medicine, was the regional coordinator for these 2001-2002 trainings in Mae Sot.

These 2001-2002 trainings brought traditional health practitioners (THPs) from throughout the Karen border region to run trainings for health workers on the safe and effective traditional health practices, including how to identify and prepare locally available medicinal plants. Health worker groups (trainees) included clinic paramedical staff who were themselves refugees/migrants; the Backpack Healthworker team; and finally, modern medical staff at the Mae Tao Clinic.

The main group project that continues to be developed (2003-present) by this initial group of THPs, coordinated by KDHW and in consultation with GIFTS, is the development of a medicinal plants database for production of an herbal field manual to be distributed to refugee and IDP families and communities along the border.

<u>Burma Relief Center (BRC), Burma Humanitarian Mission (BHM) & Free-Friendly Asia (FFA)</u>

These three local and overseas NGOs funded the inception of the Nu Poe and Umpium herbal clinics and training programmes, as well as an herbalist training at Mae La camp. These NGOs became involved simultaneously or shortly after the initial 2001-2002 trainings in Mae Sot, building on the momentum of these well-attended and successful meetings.

The *Burma Relief Center*, a local Karen advocacy NGO, supports capacity building for programmes engaged in healthcare, human rights and education

programmeming – mainly within Burma. BRC granted funding for Nu Poe and Umpium clinics in their first years, supporting 3-month training programmes in each camp, as well as one training at Mae La camp. BRC's commitment was for the initial capacity building phase, and now that these clinics are considered 'established' they are no longer supplying funding. Indeed, this is a tribute to the perceived sustainability of these traditional health initiatives.

The *Burma Humanitarian Mission* (BHM) is a Los Angeles-based NGO that raises and dedicates aid directly to local health programmes for IDP populations along the border, in particular the Backpack Healthworker Programme. In 2002 and 2003 (??) BHM granted financial support to the Nu Poe clinic to use for training young medics from IDP areas, as well as for broader curriculum and programme development, with the ultimate goal of building a 'self-sustaining and capacity-building health system for the Karen.'

The final NGO involved in Nu Poe clinic is *Free Friendly Asia* (FFA), a small NGO run by a German doctor. Unfortunately I have not been able to access more detailed information on this organisation, although in 2003 FFA donated partial support for a training session at Nu Poe, provided the clinic with a powder grinding machine, and contributed to the conceptualisation of adding a traditional health component to IDP mobile clinics.

Karen Environmental and Social Action Network (KESAN)

KESAN, founded in 2001, is a local Karen organisation dedicated to environmental conservation and programme development throughout northern Karen state. KESAN also focuses on preserving 'indigenous knowledge' including health knowledge, as this plays an important role in land and forest conservation. To date, KESAN has supported three successful traditional medicine projects in Doo The Htoo district, Karen State, with the objective of helping encourage communities, and Karen youth in particular, to learn about, preserve and use traditional medicine.

In 2005, the GIFTS-KDHW team began discussions with key KESAN staff about joining forces in the development of an herbal manual for use by refugee and IDP communities. KDHW and its affiliates currently cover a service area mainly limited to the more southern parts of Karen state, whereas KESAN focuses on the northern regions. In partnership, it is believed, these two networks will be able to cover the entire span of the border, in turn providing more comprehensive services to all IDP populations.

Drug and Alcohol Recovery and Education Programme

This final NGO is affiliated more tangentially to my target network, connected through one of the top staff at No Poe herbal clinic, but is conducting very effective and sustainable work in traditional health along the border.

The Drug and Alcohol Recovery and Education Programme (DARE) Network was formed in 2001 as a detoxification and drug and alcohol abuse recovery programme for refugee and migrant populations along the border. DARE teams currently work in eight refugee camps, the Mae Tao clinic, the Mae Sot Migrant worker village and the Karen border village of Thee Law Thi.

DARE uses an integrative health approach, incorporating Western and traditional Burmese medical techniques and beliefs – including acupressure, acupuncture, herbs and herbal saunas – to help patients recover from and cope with addiction and related health issues. Dr. Hussein, one of the senior herbalists and staff at the *Nu Poe herbal clinic* was DARE's primary consultant on their herbal medicine regimen. DARE director, Pam Rogers also reported that select, 'high profile' cases have been referred to Ashin Hla outside of Mae Sot for detoxification treatment, as this monk is 'very highly regarded and respected' for his knowledge and cures.

Though DARE is focused on running an independent TRM programme, it is connected to the greater THP network in this area through Dr. Hussein, as well as indirectly through Ashin Hla. This confirms that the THPs involved in my research are well respected and widely known throughout the refugee camps and villages along the border.

APPENDIX C: PROFILES OF CAMP-BASED HERBAL CLINICS AND PROGRAMMES

Umpium herbal clinic

Umpium is the second largest refugee camp along the Thai-Burma border. It currently hosts 18,403 refugees, mainly from the Karen ethnicity. As in No Poe, healthcare at Umpium is delivered by Aide Medicale Internationale (AMI), with supportive reproductive and community health services provided by American Rescue Committee (ARC). The main diseases treated at Umpium (as in most camps) include: acute respiratory infections, diarrhea, malaria, and tuberculosis. In 2002, the medic to refugee ration was 1:1197.

Umpium camp was established in 1999 when refugees were relocated from two smaller camps Huay kalok, and Morger, which lay too close to the border and thus caused security problems. Umpium's current location is tucked more deeply into the mountains, making the terrain steep and very difficult to traverse, and creating mudslide and other environmental dangers (a drainage system was eventually installed by UNHCR partners in 2004). Although AMI and ARC train and employ a fairly large number of local staff, the expatriate staff at Umpium remains in control of referrals and treatment protocols. During interviews with the medical staff in the camp (ECHO 2002), medics reported frustration with the common procedure which sends their requests for drugs to Mae Sot and then on to Bangkok before receiving approval and eventually supplies – sometimes too late. These concerns were voiced in other camps where bureaucracy and lack of funding overshadow patient care, negatively affecting perceptions of medical staff's reliability.

The *herbal clinic* at Umpium was established in 2002 as a partner to the Nu Poe clinic. The two clinics share treatment strategies, training curriculum and some patient referrals. In 2003, the Umpium clinic staffed nine herbalists and support staff, and ran its training programme from August 2003 – January 2004. In 2003, the clinic treated a total of 1253 inpatient and outpatient cases, with the most common conditions falling under reproductive health issues, hypertension, respiratory conditions, gastric conditions and pain.

Umpium's first traditional medicine training ran through late 2002 and trainees came from within Umpium camp and from Karen State, Burma, to attend a programme which followed the same structure and internship requirements as the Nu Poe training.

The staff director of the clinic, Hti Shaw Lay, is one of my key informants and was one of the first herbalists I interacted with in 2002 when I witnessed his work with an HIV orphan at the Mae Tao clinic. In this small, single case example, Hti Shaw Lay treated this young boy a complex herbal protocol, and within several weeks the child's opportunistic infections had subsided. Hti Shaw Lay was an active member in many of the group meetings held in Mae Sot, and continues to deal with reproductive health, STD and HIV issues in Umpium and at the Paw Bu Hla Hta herbal clinic within Burma. He also stated his hopes and willingness to collaborate with NGOs to bring palliative care to these patients as virtually no other HIV care is available to people living with HIV/AIDS at this time.

The herbal clinic director at Umpium, Dr. Tin Lyaw, attended some of the earliest group meetings, and also participated in two individual in-depth interviews in 2005 and 2006. Tin Lyaw is in his mid-fifties and has been practicing traditional medicine for approximately 30 years. According to a local aid worker, Dr. Tin Lyaw is a highly respected member of the refugee community and Health Committee of the camp. Tin Lyaw's individual practice and involvement in the herbal clinic varied over the years depending on refugee interest, available aides, and support from interested NGOs such as BHM. At one time he reported overseeing a team of about 10 apprentices helping him collect and prepare medicines, but by 2006 all but one have moved on or been granted asylum.

In a late 2005, it was reported that the Umpium clinic had temporarily closed down due to lack of funding and herbalist availability. By mid-2006 the clinic was functioning again at capacity. The core staff, including Hti Shaw Lay and Tin Lyaw, continue to practice individually and within the clinic, overseeing a group of trainees and staff serving refugee needs. This fluctuation in practice is indicative of the constantly changing financial, political and security issues confronting refugees, even in their attempts to create sustainable programmeming. Continual challenges include: increased security in the camps with the influx of new refugees, lack of outside funding, loss of key staff to resettlement in third countries, and difficulties accessing plant and mineral materials for making medicines.

Mae La herbal group

Mae La camp is the largest camp along the Thai-Burma border, currently hosting 45, 029 refugees. Until June 2005, healthcare in the camp was managed by Medecins Sans Frontieres. In 2005, the two outpatient facilities handled over 12,000 cases per month, reporting malaria, acute respiratory infections including TB, and diarrhea as the main health concerns. Malaria research and care is provided in-part by the SMRU (Shoklo Malaria Research Unit). Up to 20% of the patients in both inpatient and outpatient departments regularly come from villages outside of the camp. Today Mae La's healthcare is managed by Aide Medicale Internationale (AMI). In 2002, the medic to refugee ratio was 1761:1, but this may have changed under AMI.

Because of its size and easy road access to Mae La from Mae Sot, this camp gains a large of amount of exposure through visiting donors, politicians, aid groups, as well as many international research projects. The camp is reported as running almost as if it were a small town, with very active camp committee involvement (ECHO 2002). In fact, the Karen Refugee Committee holds most of its larger meetings at Mae La, with a recent June 2005 meeting drawing 77 members from various camp committees, Karen advocacy groups, UNHCR, and international NGOs (KRC report June 2005).

Despite these generally positive outcomes, primary care, nutrition and sanitation remain a constant and at times daunting task in this large camp. A waste management system, vital for avoiding communicable disease outbreaks both in camp and in surrounding Thai villages, was only established in 2005 (UNHCR 2005). Because of its close proximity to the highway and highly secured boundaries (Thai police and barbed wire barriers), refugees are unable to forage for supplemental food supplies and common medicinal plants. A 2003 study of 182 households in Mae La

found malnutrition rates of children under five to be 33.7% underweight, 36.4% stunted, and 8.7% wasted (Banjong et al. 2003).

In fact, a July 2006 report from Mae La camp told of a crackdown on aid workers due to recent incidents of medical neglect leading to the death of a number of children and adults. The Thai MOI (not commonly a strong advocate for refugees) was indeed leading this crackdown, demanding that aid organisations change their behavior or lose their rights to practice in the camps (personal communication, July 2006).

The Mae La example is an interesting demonstration of how traditional medicine resources are functioning without formal structure or NGO support. Seven herbalists, referred to as the *Mae La herbal group*, were involved in my in-depth and group interviews are based in Mae La camp, although they worked together more loosely without the establishment of a clinic. Discussions are on-going about the creation of an herbal clinic at Mae La, but for the time being these herbalists work through individual and joint practices, as well as apprenticeship trainings based out of their individual practices. Three of these herbalists travell regularly to Burma and border villages to consult, treat and train communities in traditional health practices.

The THP considered most senior at Mae La, Par Shwe Naing, conducts periodic trainings for herbalists and trainees from in camp and the surrounding areas. Par Shwe Naing is one of the few THPs involved in my research who gained formal training through a certification programme at a Burmese government supported Traditional Medical College. In 1985 he authored a comprehensive book on traditional medicine while working as a doctor and herbal trainer at Karen National Union camp. Unfortunately, all of his books were burned during the destruction of the camp by SPDC forces, and he is currently working on his third draft of this book. Par Shwe Nain practices and teaches full-time in Mae La camp.

Two of the most active THPs in Mae La are ‘alchemists,’ practitioners working with mineral and gemstone compounds, who regularly deliver primary and some more acute health care services to refugees in the camp. Some of the more acute care outcomes were shared through case studies of the treatment of opportunistic infections of HIV (using ‘bhasma’ formulae as detailed in classic Burmese and Pali texts), which is otherwise untreated by INGO clinics. Unfortunately, the minerals and materials for these medicines are very expensive and hard to access, making traditional treatment almost as rare as Western care.

According to these THPs, refugees regularly refer to the INGO clinics as “paracetamol clinics”, and come to seek traditional health care because of its more individualised and holistic approach. All seven Mae La herbalists are very interested in opening a clinic, together or separate from the INGO clinics, as well as cultivating a working and training garden. These THPs feel however that large size, tight security and more intense foreign involvement in this camp makes it harder for grassroots initiatives to take hold and gain support in Mae La. A recent proposal to build kitchen herbal gardens for families in camp, one herbalist reported, would require gaining permission from all Thai MOI (ministry of interior), UNHCR, INGOs and Thai police offices before proceeding. In an October 2005 meeting, Hsaw Thein (director of KDHW) reported that he is currently negotiating with Mae La camp authorities for the creation of an herbal clinic.

One of my key informants, Thay Dah Soe, is registered in Mae La camp, although he spends the majority of his time within Burma and running the KDHW

office in Mae Sot. Thay Dah Soe's belief is that traditional medicine can be most effectively spread throughout Mae La and other camps using primary education. Teaching children to engage in their heritage and learn from their elders[57] may encourage more lasting investments in traditional medicine than any other initiative, Thay Dah Soe feels.

The Mae La example demonstrates how THPs are practicing without NGO support or any formal structure, but also highlights the priority these practitioners place on establishing a clinic so that they may consolidate their practices and build a more lasting presence in camp. THPs are willing to form this with or without the collaboration of INGOs, although outside support seems to be the preferred method. Hsaw Thein's ongoing communication with camp authorities show that the interest is sincere.

Mae Ra Ma Laung/Mae La Oon herbal initiative

Mae La Oon and Mae Ra Ma Laung camps in Mae Hong Song province are the fourth and sixth largest camps along the border, respectively, with Mae La Oon hosting 10,790 refugees and Mae Ra Ma Laung hosting 8,907. These camps were established in 1995 and were initially managed by Aide Medicale Internationale (AMI). Today, they are run by Malteser International (MI, formerly Malteser Health Deutschland or MHD), a Germany-based INGO. MI provides all primary and curative health care, as well as public health education in the camps. Most common conditions treated echo those in all other camps, although vitamin B deficiency has been a larger problem. The 2002 medic to refugee ratio was about 1:500.

These camps are located fairly close together along the River Yuam river in northwest Thailand. The jungle terrain makes access to the camps very difficult by vehicle or foot (minimum seven hours by car during the rainy season), and dangerous flooding and landslides threaten the area during the rainy season, resulting in UNHCR's implementation of a formal evacuation plan for the area.

According to an education trainer in both camps (ZOA), the populations of these two camps vary significantly in education, culture and religion – highlighting my earlier reference to the various 'cultures' of each camp. Mae Ra Ma Laung is populated by many of the well-established KNU leaders and families who were forced from Burma after the fall of Mannerplaw. This population tends to be more conservative, mainly Christian and fairly well educated. This is confirmed in the 2002 ECHO evaluation that found Mae Ra Ma Laung to be well organised and run by the Karen Refugee Committee and local leadership. In fact, the local refugee leadership at Mae Ra Ma Laung staged camp-wide protests in June 2005, criticising MI's health and management policies as disrespectful, culturally inappropriate and oppressive. The greater Thai-Burma Karen Refugee Committee responded and some changes have since been made in negotiation with MI (awaiting more detailed information).

These demographics also affect Mae Ra Ma Laung refugees' receptivity to traditional medicine, as TRM is considered unsophisticated and not modern. Mae La Oon, in contrast, is inhabited by peoples from remote villages who practice Buddhism

57 One of his ideas is to have a "Medicinal Plants Day" competition where children grow and present an important medicinal plant for prizes and recognition. They could also sell their plants to households for cooking, as well as for 'hang over cures' which he believes would be in high demand.

and engage regularly in more local traditions, and at least two of the camp leaders are enthusiastically interested in and supportive of traditional medicine programme development. One of the active THPs involved in my research, Thar Lin, was based in Mae Ra Ma Laung, although he travelled regularly to Mae La Oon to treat patients.

Thar Lin is a traditional practitioner with almost 50 years of training and practical experience. He travelled to visit his daughter in Mae Ra Ma Laung in 2004 (??) and was asked to stay and treat patients. He obliged, setting up a small clinic in the camp, and within his first three months of practicing, he reporting treating almost 2000 cases (??). One of the distinct advantages Thar Lin has over THPs and clinics in other camps is his easy, generally unrestricted access to intact jungle hills for the collection of medicinal plants. The remote location of these camps makes tight security virtually impossible, allowing refugees (and THPs) to forage for supplemental foods and medicinal plants without serious restrictions. Home herbal remedy preparation and use is also reported as being higher by refugees in this camp (RB).

In 2006, ZOA's vocational director at Mae La Oo approached Thar Lin to submit a proposal for a traditional medicine training programme. The ZOA country director, currently a MD, was indeed interested but the proposal was denied by ZOA headquarters for fear of medical liability. Thar Lin is currently based in Mae La camp where he has been asked to treat patient's at the camps Bible School.[58]

Thar Lin was not directly involved in any group interviews or meetings during my research period, but eagerly shared his own herbal handbook, called "The Doctor is All Around You" (via ZOA educator Richard Berkfield) with the *Karen Traditional Health Network* for the creation of an herbal manual for the refugee community. This 130-page book was reviewed by Hsaw Thein who found it to be a well-presented text that would serve the border population very well.

Tham Hin herbal programme

Tham Hin was established in 1997 and is the fifth largest refugee camp, located along the southern Thai-Burma border in Ratchaburi province. The camp currently hosts 9,483 refugees. Until June 2005, health care was managed by Medecins Sans Frontieres, and today it is managed by the International Rescue Committee. In 2005, the monthly OPD caseload was 2,000 and the IPD caseload averaged 130, treating the same general conditions seen in other camps.

Tham Hin is considered to have the most desperate and unsanitary living conditions of all Thai-Burma refugee camps (TBBC annual report). Since its inception, the space allotted for this camp has been below international standards, and 'temporary' plastic-roofed shelters have turned into permanent housing. Over the past decade the camp population has suffered serious outbreaks of dengue fever and typhoid, and the sanitation situation has reached emergency levels – but with no resolution. (TBBC annual report, pg. 12) Despite high level interventions and negotiations with the Thai government, no improvements or extended space has been provided. Because of these high-risk conditions, refugees from Tham Hin currently

58 The Bible School at Mae La is known to be the best Karen school along the border, and students are able to earn a Bachelor of Theological Studies.

receive top priority for third country resettlement (BBC news, Sept. 1, 2006, http://news.bbc.co.uk/2/hi/asia-pacific/5301736.stm)[59].

Despite, or perhaps because of these very difficult conditions, a group of herbalists at Tham Hin came briefly together to form a small clinic and training programme, referred to as the *Tham Hin herbal programme*. In 2003, a group of ten herbalists approached the Catholic Office for Emergency Relief and Refugees (COERR) for funding for a small traditional medicine programme, including money for notebooks, office space for meetings, and the provision of meals. COERR granted this support and this group of THPs held a twice annual series of educational trainings to a mix of interested refugees – men, older women and girls – on how to use herbal remedies for themselves and their families/communities. They used a traditional medicine book handed down by the son of a former KNU president, called "Herbal Medicine for the Grassroots," to develop their curriculum. Within a year, COERR stopped funding this group (in favour of a candle-making workshop[60]), and seven of the core group of herbalists left to work for other NGO projects. The remaining three herbalists, a 'city healer,' a 'jungle herbalist' and a woman focused on women's health were dedicated to their practice despite lack of funding and continued to educate the community, as well as treat patients.

This example of a TRM initiative shows how refugees, even in very desperate settings, have high receptivity to livelihood development and continuing previous professions. Funding was a serious consideration for most, but the core group of 'professional' THPs continue to practice regardless of funding. The initial input by COERR sparked a surge of interest and activity by THPs which has had lasting effects.

59 The majority of these refugees are being resettled to the US after the US government recently lifted its ban on Burmese refugees based on their association with 'armed rebel groups' including the KNU.

60 The local COERR staff liked and were very supportive of the TRM project, but COERR doesn't 'officially' deal with health so the TRM project was very temporary.

APPENDIX D: TRADITIONAL BURMESE MEDICAL THEORY

The medicine used by these practitioners, referred to as 'Traditional Burmese Medicine,' is based in Ayurvedic medicine, as well as indigenous practices and beliefs of local regions, religions and ethnic groups, including local Buddhist, animist and family traditions, spiritualism and astrology. These various forms of knowledge and practice have been incorporated to form Burma's current 'formal' traditional medical system, which include four branches: Desana naya, Bethi tea naya, Netkhata veda naya and Vissadara naya. 1) *Desana naya* relates to concepts of hot and cold seen in many indigenous medical systems, and draws from Buddhist philosophy. 2) *Bethi tea naya* refers to Ayurvedic medical theory and practice, including diagnostic methods using universal elements, mind-body constitutions (doshas) and pulse; as well as the extensive source of herbal and mineral compounds used in treatment. Ayurvedic theories, as adapted into Burmese traditional medicine, were delineated by one of my key informants, the abbot of a monastery and master practitioner along the Thai-Burma border:

Panchamahabhutas (universal elements and associated properties)*

No.	Pali	English	Colour	Taste
1	Pa-hta-we	Earth	Dark black	Rich taste
2	Ar-paw	Water	Red and pink	Sweet, salty
3	Tae-zaw	Fire	White	Sour and spicy
4	Wa-yaw	Air	Yellow	Bitter

*Panchamahabhutas refers to Ayurveda's five elements, which includes these four elements + space. Burmese theory only uses four, but also relies heavily on spiritual elements, a form of the space element.

Doshas (mind-body constitutions)

No.	Name	Meaning
1	Vata	Motion (physical and mental)
2	Pitta	Metabolism (digestion, absorption and assimilation)
3	Kapha	Cohesiveness (body's structure and stability)

3) *Netkhata veda naya* uses calculations based on the zodiac, planet alignment and the patient's time of birth and age, and often prescribes diet, lifestyle and behavioral changes. 4) *Vissadara naya* relates to spiritual practices such as meditation, and also incorporates alchemical practices using minerals and metals. (Linn 2005, Burma Lawyers Council 2006)

These four branches have been formalised by the Burmese government's Department of Indigenous Medicine, and are documented in over 4000 ancient palm-leaf and parchment texts (WHO 2001). These texts do not necessarily include the extent of indigenous and 'jungle' knowledge and medicinal plants, minerals and other materials used by the traditional practitioners involved in my research, but do form the official basis of this Traditional Burmese Medicine at this time.

APPENDIX E: EXCERPTS FROM NU POE AND UMPIUM ANNUAL REPORTS

Excerpts from 2003 Annual Report of Nu Poe (Noe Poe) and Umpium (Ohn Pyan) herbal clinics

Annual Report on Traditional Herbal Medicine Clinic
At Noe Poe Refugee Camp
Date-1/12/2003

1. (A) Name of Nu Poe Clinic Staffs
20 staff listed – names withheld to ensure confidentiality

(B) The name of Ohn Pyan Clinic staff;
9 staff listed – names withheld to ensure confidentiality

2. Health Care Activities

(a) Preventive care

1) Health education how to prevent illness from seasonal weather changes. How to prevent of communicable disease in local traditional ways and preventive herbal medicine which has been using effectively in those days and up to present.

2) To promote nutrition

a. How to choose seasonal vegetables and plants which contains rich substance for nutrition and preventive measure.
b. How to prevent of common illness due to the side effect of fruits, vegetables and plants on seasonal changes after etc.

(b) Curative care

All patients who are relied and willing to receive treatment are being treated as OPD or IPD according to the severity of diseases. We are diagnosing the disease in traditional way and give treatment with prepared herbal medicines until the disease cured completely. Patients those who come are not in camps but also villagers from Thai side and inside Burma from border remote area.

3. Cooperation and co-ordination with other organisations;

We are willing and always welcome to other health organisation in sharing knowledge and experience of curative, preventive and public health education. And also from experts and technicians are to update herbal medicines and systematically collection of plants and do communication and also growing plants in herbal garden.

4. Herbal garden

The concept of herbal garden is aiming to grow rare species of medicinal; plants, some commonly use plants and some vegetables of nutritional supplement for patients, related in treatments. We started the work in the first quarter of this year as soon as we received permission from Thai authority on 24/12/2002 later we have to stop as

the ground, the plot id reserved for the extension of camp new arrival. But on 15/7/2003 as there was no more new arrival, Thai authority informs us and allowed for continuation of herbal garden plantation. Since then we continued the programme and up to this present we have grown, herbals annual and biannual available plants, which we could collected. Through this programme we could obtain the benefit for plants sample for demonstration, description and identifying plants. And also we are exchanging rare species between herbalists from herbal garden.
In the year 2004 we are intending to plant a new herbal garden at Ohn Pyan herbal clinic if the situation permits.

5. Training

In purpose of to conduct the role co-operation and co-ordination between clinical staff and traditional healers in public health care service we are focusing especially in public health education at preventive care which progression utterly depending on participation of community.

All trainers (expect two who returned to their clinics on account of personal affairs) have completed the course very well in both theory and practical. Now they are ready to apply practical field work in together with clinic staffs at public staffs at public health care services. The detail if basic herbal training could be seen in attachment (F)

6. Suggestions from local authority and elders

Curing disease and illness by way of traditional herbal medicine is one of the basic knowledge which local people relies and survives from illness since in those days and up to this present. If cheaper expenses, fever side effects, available at any where and even the patients could easily prepare and treat to minor common illnesses by themselves are the advantages. They request us to find out those hidden and almost vanishing formulae from local people and then document it, develop it and to find out new update treatments. Then after confirmation, to designate all of most effective and could easily prepare treatments to community at out reach from local health workers would help them a lot in solving their health problems. And then all the result and progress must be in well documentation.

9. Conclusion

We herbal team, we have the aim and goal of to find out to promote and –the knowledge to document and to distribute herbal knowledge among the people. Although we do not receive personal uses from it voluntarily our team members are working without despair and disheartened. Receiving more of knowledge and gratitude form patients those have been cured the maximum benefit we obtained within three years of this programme. We are gradually clear out the problems even though we have many difficulties in transportation, communication, insufficient accessories and inadequate family provision. With an unswerving devotion we are firmly determine to continue as possible as we can by the help of some enthusiasts.

We are sending our special thanks to Mr.Dang Nyo and friends from (BHM) Burma Humanitarian Mission. Also to Dr.Wolfgang of (FFA) support for the expenses on basic herbal training and powder grinding machine, and also the idea on concept of herbal role in mobile health herbal clinic. Also special thanks to Dr.Gerard Bodeker

from Green College, University of Oxford on his suggestions, advice and some guidelines on preventive concern. Also thanks to the donation form patients, local enthusiast, local authority and BBC in providing foods for patients and in clinic construction.

We are always welcoming to all advice or suggestions form experts and technicians and assistance or support or either cooperation or participation from sympathizer, enthusiast and organisations.

10. Attachments-

Attachment (a.1) Case report form, Nu Poe herbal clinic (OPD) (1/2/03-31/12/03)

No	Disease	Under 12 yrs		Total	Over 12 yrs		Total	Grand total
		M	F		M	F		
1	Mump	19	25	44	7	22	29	146
2	Cough and common cold	112	129	241	157	252	409	650
3	General weakness	54	64	118	81	115	196	314
4	Urinary tract infection	11	6	17	245	455	700	717
5	Leucorrhea					301	301	301
6	Menstrual disorder					1214	1214	1214
7	Diarrhea	81	82	163	97	111	208	371
8	High blood pressure				56	179	185	185
9	Gastritis	99	106	205	160	242	402	607
10	Anemia	2	2	4	10	44	54	58
11	Other diseases	103	144	247	123	172	295	542
12	Sprain & dislocation	1	1	2	17	29	46	48
13	Fracture					1	1	1
14	Arthritis/Neuritis	2	3	5	114	182	296	301
15	Be ri bi ri	5	6	11	69	61	130	141
16	Pile	1		1	4	1	5	6
17	Eye disease	10	13	23	18	21	39	62
18	Hepatitis	2	1	3		8	8	11
19	Mastitis					2	2	2
20	Gland enlarge	1		1	27	68	95	96
21	Tooth ache	48	66	141	178	178	356	470
22	Mental disorder					11	11	11

23	Paralysis				20	19	39	39
24	Stroke				5	3	8	8
25	Diabetes				1	1	2	2
								5,525

(A.1.1) Case report from No Poe clinic (IPD)

No	**Disease**	**Under 12 yrs**		**Total**	**Over 12 yrs**		**Total**	**Grand total**
		M	**F**		**M**	**F**		
1	Paralysis				29	18	47	47
2	Beri Beri	3	1	4	38	23	61	100
3	Hepatitis				2	4	6	6
4	General weakness	5	6	11	7	17	24	35
5	Menopausal syndrome					17	17	17
6	Mental disorder					2	2	2
7	High blood pressure				12	7	19	19
8	Sprain & dislocation	1	1	2	4	3	7	9
9	Tremor				8	1	9	9
10	Fracture				1		1	1
11	Stroke				4	2	6	6
12	Fits					3	3	3
13	Diabetes					3	3	3
	Total	9	8	17	105	100	205	222

Remark- The average cost of medicines for one patient about 13 baht at No Poe herbal clinic.

Attachment (A.2) Cases report from at Ohn Pyan herbal clinic (OPD)

No	**Disease**	**Under 12 yrs**		**Total**	**Over 12 yrs**		**Total**	**Grand total**
		M	**F**		**M**	**F**		
1	Gynecological disease					215	215	215
2	Hypertension				69	84	153	153
3	Numbness pain				66		66	66
4	Pneumonia				17	6	23	23
5	Asthma	2	3	5	3	6	9	14
6	Anemia				2	3	5	5

7	Dysentery	2	1	3	2	4	6	9
8	Common cold	15	4	19	6	11	17	36
9	Gastric ulcer				2	5	7	7
10	Diabetes				3	2	5	5
11	Menorrhagia					3	3	3
12	Stroke with paralyse				5	3	8	8
13	Electro therapy				98	61	159	159
	Grand total	19	18	27	273	393	676	703

Attachment (A.2.1) Report from Ohn Pyan herbal clinic (IPD)

No	**Disease**	**Under 12 yrs**		**Total**	**Over 12 yrs**		**Total**	**Grand total**
		M	**F**		**M**	**F**		
1	Beri beri	2		2	8	15	23	25
2	Heart disease				1	4	5	5
3	Ascites				1	2	3	3
4	Nephritis	1	1	2	3	9	12	14
5	Hernia	1		1	1		1	1
6	Menstruation disorder					22	22	22
7	Scanty urine	1		1				1
8	Spleenitis					1	1	1
9	Leucorrhea					10	10	10
10	Hypertension				11	18	29	29
11	Dysentery				1		1	1
12	Fever	1		1				1
13	Gastric pain		1	1	7	10	17	18
14	Nompneumonia	3		3	7	13	20	23
15	Whooping cough	1		1				1
16	Asthma					4	4	4
17	Skin disease	4	4	8	8	8	16	24
18	Hemorrhoid	1		1	13	5	18	19
19	Rectumprolapse	1		1	1		1	2
20	Tooth ache				3	1	4	4

21	Eczema				5	3	8	8
22	Eye disease				4		4	4
23	Gland enlarge				1	7	8	8
24	Numbness pain				13	8	21	21
	Total	16	6	22	88	140	228	250

Remark- The average cost of medicines for one patient is about 44 baht at Ohn Pyan herbal clinic

(A.3) The list of expenses on herbal medicines at Nu Poe herbal clinic

-Herbal medicines preparing at No Poe herbal clinic are mostly with officinal materials, which have bought from pharmacy for indigenous medicinal ingredients.

-The preparation is combined with wild medicinal plants collected from the forest. The cost of collection and transportation is not including at the following list of herbal medicines.

From (1/2/2003-31/12/2003)

No	Item	Quality	Quantity	Price per unit (Thai Baht)	Total price (Thai Baht)	Remark
1	Malaria & fever	Tab/powder	3 kgs	1300	3900	
2	Embrocating for fever	Oil	4 liters	200	800	
3	Cough+Emphysema	Powder	5 kgs	800	4000	
4	Cough+Emphysema	Lotion	3 liters	300	900	
5	U.T.I	Tab/powder	5kgs	400	2000	
6	Leucorrhea menstrual disorder	Tab.powder	30 kgs	350	10500	
7	Leucorrhea menstrual disorder	Liquid	200 liters	30	6000	
8	Skin disease+gland enlarge	Tab/powder	10kgs	100	1000	
9	Skin disease+gland enlarge	Lotion	100liters	40	400	
10	Hypertension	Tab/powder	4 kgs	800	3200	
11	Nephritic syndrome	Powder	2 kgs	500	1000	
12	Nephritic syndrome	Liquid	50 kgs	20	1000	
13	Hepatitis, Jaundice	Tab	1 kg	1500	1500	
14	Digestive tract, flatulence	Tab/powder/liquid	8 kgs	700	5600	

15	Paralytic stroke	Jam/tab	5kgs	1000	5000	
16	Paralytic stroke	Solution/ liquid	40 liters	50	2000	
17	Analgesic local application	Balm/ ointment	100 tins	15	1500	
18	Cardiac infraction	Powder	1 kg	1500	1500	
19	Anemia	Tab/powder/solution	10 kgs	700	7000	
20	Diet protein supplement	Meat/fishes				5000
21	Transportation	Car fare				3000

Attachment. (A.4) The list of expenses on herbal medicine at Ohn Pyan herbal clinic - (11/8/03-12/1/04)

No	Item	Quality	Quantity	Price per unit (Thai Baht)	Total price (Thai Baht)	Remark
1	Anti hypertension	Pills	11000	30+100	3300	
2	Anti malaria+analgesic/ fever	Pills	13000	35+100	4550	
3	Anti malaria+analgesic/ fever	Pills	15000	35+100	5250	
4	Menstrual disorder	Pills	20000	35+100	7000	
5	Cough, Mucosotvent	Pills	13000	35+100	3900	
6	Anti diarrhea	Packs	450	2.5 packs	1125	
7	Anti kazziness	packs	300	2.5 packs	750	
8	Leucorrhea	packs	350	3 packs	1050	
9	Anti olihuria	packs	178	2.5 packs	445	
10	Electrolyte syrup/energy	Syrup	250 liters	10 liters	2500	
11	Anti flatulence	Pills	9000	30+100	2700	
12	Amenorrhea	Pack	34	2.5 packs	85	
13	Analgesic balm	Ointment	8 kgs	250	2000	
14	Beri Beri	Powder	10 kgs	250	2500	

15	Anti Dropsy	Jelly	6 kgs	250	1500
16	Skin disease	Ointment	2 kgs	150	300
17	Anti hemorrhoid	Ointment/ powder	5 kgs	300	1500
18	Ointment for gland enlarge	Oitment	1 kg	500	500
19	Toothache	Powder	4 packs	75	300
20	Eczema	Oitment	1 kg	300	300
21	Electric stimulator therapy	Battery	4 doz	90	360
	Grand total				41,895

The herbal medicines preparing at Ohn Pyan herbal clinic are mostly with medicinal plants collected from the forest. In calculation of expenses on preparing herbal medicine it has also included the expenses and transportation charges of medicine plants searching party trips.

Attachment. (D) The name of some common plants use in in preparing herbal medicine according to disease

-The name of plants listed under the diseases are not all including in prescription, only the combination of or four plants as necessary for treatment according to the condition of disease.

Over 120 plants listed – withheld to ensure intellectual property rights

Attachment. (F) Basic herbal training one year course report

Concept of herbal medicines in Mobile Health Clinic Programme

1. Subject Final report of 'Basic Herbal Medicine Training'

2. Short Summary We, the programme implementation team with 9 members had a meeting on 4/6 /2002. To implement the first step of programme was 'Basic traditional herbal medicine training' we selected five training staff and saw Tin Win Hlaing as incharge. The training was started at 4th Dec 2002 and would end at 31st Jan 2004.

3. Training Activity The training was opened with 8 trainees on 4/12/2002, later joined two trainees from Klait Tode (MHC). Among the trainees, one from Pa-An district and one from Klait Tode (MHC) returned to their unit due to social problem. Only 8 trainees would remain at the end of training.

3.A. The list of trainees

No	**Name**	**Age**	**Village**	**Twonship, district**	**Mother**

15 trainees listed – omitted for confidentiality

3.(b) Subject and Time table

Term	Period	Subject
1st Term	5/12/2002 to 30/4/2330	-The (5) Base elements.
		-The advantage and disadvantage of medical plants regarding on its properties to base element.
2nd Term	1/5/2003 to 30/6/2003	-Diagnosing disease in traditional way through feeling
		pulses at different positions.
3rd Term	1/7/2003 to 31/1/2004	-Useful common medicinal plants and application to disease
		-Collection of med-plants and methods of preparation herbal medicine (both theory and practical)

First term schedule

During the first four months, trainees were able to learn the basic four elements of traditional medicine and its result of benefit and side effects.

Second term schedule (2 months)

During the second semester, trainees were able to learn on diagnosing diseases in way of traditional method by pulsation.

Third term schedule (6 months)

During third semester, trainees were able to learn the subject of

(i) Medicinal plants and method of collection
(ii) How to prepare herbal medicine
(iii) Treatment by herbal medicine

(B) Trainers

During a year of training, trainees were taught by two permanent trainers and occasionally helped by other trainers.

4. Comment and suggestion

During the training all trainees seem to have a great interest in traditional herbal method. All the trainees were now able to translate their theoretical knowledge to practical field. All the trainees would be able to work on their community health by

way of traditional method if necessary. As all the trainees have sufficient period to learn the effectiveness of traditional herbal medicine at No Poe herbal clinic by treating many patients with different kinds of diseases. During one year of training they have practical of treating patients counted up to 1170 (OPD) and 222(IPD). They also learned that people were haring interest more and more in traditional herbal medicine; received effective treatment at low cost; easy to find and prepare and safely to use with less side effects.Two of trainees were failed as no other way except to let them returned to mother unit on account of their own social problem. We herbalists belief that to maintain and developing the usage of traditional herbal medicine which have been using generation after generation is our responsibility. Our best hope is if we have trained a younger generation, it would bring a lot of benefit towards community who lived in rural remote areas. Therefore we suggest that the programme to continued.

APPENDIX F: PUBLIC HEALTH SAFETY INFORMATION FOR FIELD MANUAL

Public Health Safety Information: compiled for field manual for refugee & IDP use

Author: Cora Neumann, February 2006
(Translated by language and cultural appropriateness before entry into manual)

Malaria
Symptoms: High fever, which comes and goes every few days, headache, nausea, shaking chills (rigors), sweating, and weakness. *P falciparum malaria* is one of the most common types along the Thai-Burma border and cannot be treated with quinine (common traditional treatment).

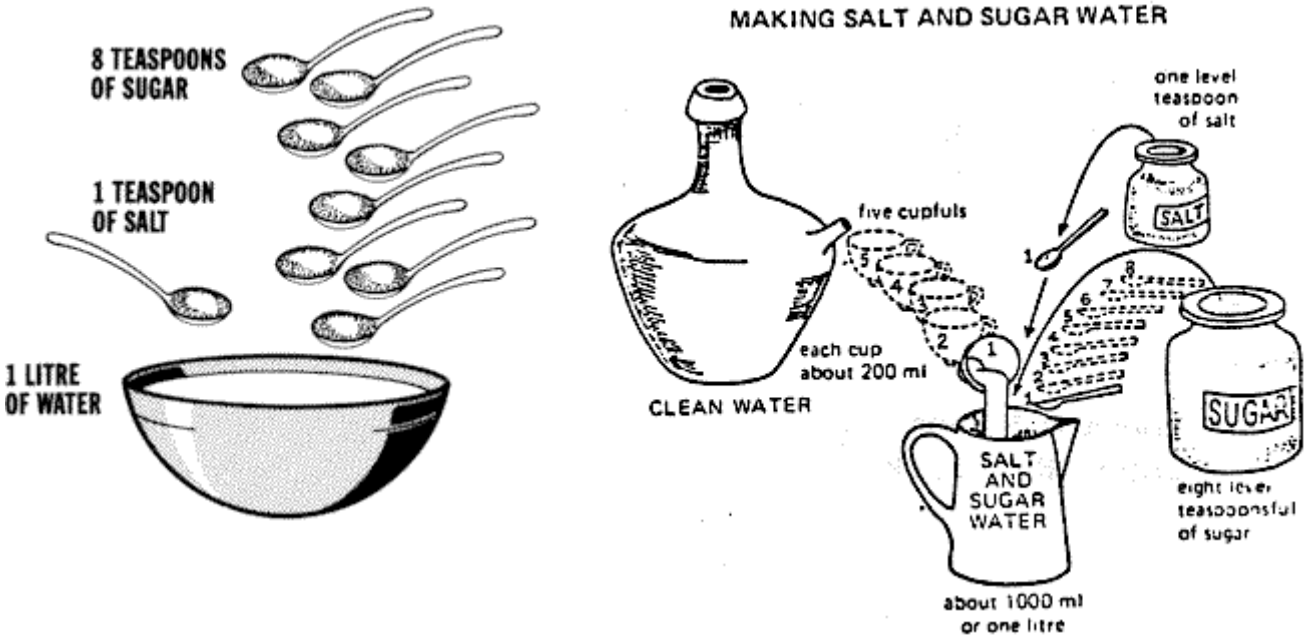
Safety info: Persons with P falciparum can devlop severe hemolytic anemia (the red blood cells actually break down), kidney failure, coma, and death. Therefore, it is important to seek medical treatment for all forms of malaria.

Diarrhea
Symptoms: Loose, watery stools occurring more than three times in one day, sometimes accompanied by cramping abdominal pain, bloating or nausea. Diarrhea often away on its own, but if diarrhea lasts more than 4 weeks you may have a more serious illness and should visit a health practitioner or medical clinic.

Safety info:
1) **Dehydration**: Diarrhea can cause dehydration, which means the body lacks enough fluid to function properly. Diarrhea in newborns or infants for more than 1-2 days can lead to death. Begin rehydration as soon as diarrhea starts, and take your child to the doctor if any of the following symptoms appear:

- stools containing blood or pus, or black stools
- high fever
- no improvement after 24 hours
- signs of dehydration in children: dry mouth and tongue, no tears when crying, no wet diapers for 3 hours or more, sunken abdomen, eyes, or cheeks, high fever, listlessness or irritability, skin that does not flatten when pinched and released.

Homemade rehydration solution is simple to make can can save adults' and childrens' lives: add one level teaspoon to one litre of water used to boil rice (rice water) and give to person/child as often as possible throughout the day and night. You can also make this solution by adding 1 teaspoon salt + 8 teaspoons sugar to 1 litre boiled water.



Bloody Diarrhea: Blood in diarrhea + a fever and vomiting may be a signs of dysentery, which is life-threatening if not treated. Please visit a health practitioner or medical clinical as soon as these symptoms occur.

ANEMIA:
Anemia often coincides with malnutrition in children, and with pregnancy in women (at least 50% of all pregnant women suffer from anemia). The body needs iron in the blood to grow and nourish a fetus. Iron is a nutrient found in red meat, poultry, fish, dark green vegetables, eggs and beans. Anemia has been a problem in refugee camps along the Thai-Burma border.

Symptoms include:

- abnormal paleness or lack of color of the skin
- irritability
- lack of energy or tiring easily
- increased heart rate
- sore or swollen tongue
- enlarged spleen
- a desire to eat peculiar substances such as dirt or ice

Safety info: Anemia increases the risk of mothers dying during childbirth and very low birthweight of babies. In children, anemia can slow growth and brain development which harms children's ability to learn. Children and pregnant women should receive an iron-rich diet including meats, poultry or fish; dark leafy greens; beans and eggs. Cooking in cast iron cooking pots also adds iron to the diet. If available, pregnant women should take iron supplements supplied by Western clinics and hospitals throughout their pregnancy.

To avoid dangerous *childhood diseases and malnutrition*, it is best if mothers breastfeed their children exclusively during the first 6 months (no other food, water or drinks), and if possible it is best to continue breastfeeding on demand until children are two years old.

CHOLERA:
Cholera is one of the most dangerous forms of diarrhea.

Symptoms: Cholera is spread through dirty water, and will cause a sudden onset of watery diarrhea of up to 1 liter (quart) per hour in adults. Cholera diarrhea has a "rice water" appearance and a fishy odor.

Safety info: Dehydration and death can occur within a few days, so the patient should be treated with Oral Rehydration Solution immediately (see 'diarrhea' on pg. --). Cholera is spread when drinking water is contaminated with feces from a sick person. To PREVENT the spread of cholera, keep drinking water separate and protected from all waste water. Water should also be filtered clean before drinking or used in cooking. To FILTER water: 1) fold an old, clean longyi into four or eight layers (old cloth is more effective than new), 2) wrap folded longyi over the mouth of a clean container and pour water through. This can remove most cholera bacteria from the water. It is usually sufficient to rinse the cloth and dry it in the sun for a couple of hours when done. If symptoms persist or dehydration is severe, visit a medical clinic immediately.

TUBERCULOSIS:
Tuberculosis is a lung infection that can be spread from a sick person to others through coughing and sneezing. TB is often fatal, but it can be cured effectively with Western medication and should be treated immediately.

Symptoms:

- bad cough that lasts 3 weeks or longer
- pain in the chest
- coughing up blood or sputum (phlegm from deep inside the lungs)
- weakness or fatigue
- weight loss
- no appetite
- chills
- fever
- sweating at night

Safety info: TB can be cured, but the germs are strong and it takes at least six to nine months of medication to kill all the germs. If a person stops taking the medication too soon, The TB germs become even stronger and more dangerous. Anyone suffering form TB should visit a Western medical clinic immediately.

SEVERE COUGH IN CHILDREN:

If children with a cough or difficulty breathing begin drawing (pulling) in their lower chest to breathe, they may have a very serious illness called pneumonia, which leads to death if untreated. In babies 2-12 months, fast breathing = more than 50 breaths in one minute (60 seconds), and in children 12 months – 5 years, fast breathing = more than 40 breaths in one minute. Children should be taken to a Western medical clinic for assessment and medication immediately.

LEPROSY:
Leprosy is not highly contagious, but patients should receive treatment as soon as possible because leprosy causes progressive and permanent damage to the skin, nerves, limbs and eyes.

Symptoms:

- Pale or slightly red areas on the skin which have lost feeling
- Loss of feeling of the hands or feet
- Thinning of the eyebrows or eyelashes
- muscle weakness resulting in signs such as foot drop (the toe drags when the foot is lifted to take a step)
- Chronic nasal congestion may also be a sign of infection

Safety info: Effective leprosy treatment is available for free at some hospitals, and patients should seek treatment as soon as possible. Leprosy attacks the nerves in the hands, feet, face, skin and eyes, and if untreated it destroys the ability to move the limbs and to feel pain. This leads to injuries and burns, with gradual destruction or 'eating away' of the hands, legs and face. Patients should protect hands and feet with protective braces and boots, and protect the skin with traditional remedies.

PREGNANCY AND CHILDBIRTH:

Safe supplies for childbirth: To prevent infection in mother and baby, clean supplies can be used during delivery: 1) one sheet of plastic or clean cloth to place under mother, 2) one clean razor blade to cut umbilical cord, 3) two pieces of clean, unused string to tie baby's umbilical cord 4) and one bar of soap to clean hands, mother and baby.

Illness and death during pregnancy and childbirth: if a pregnant woman shows signs of sickness such as fever, dizziness, rapid heartbeat, bleeding, stomach pain, excessive swelling or rashes, or other serious symptoms, she should visit a medical clinic as soon as possible. If a woman is in labor for more than 15 hours she should travell to a Western clinic *immediately* to make sure the baby is safe.

1) **Postpartum hemorrhage**: The majority of maternal deaths (25%) are caused by excessive bleeding up to 6 weeks after delivery. Bleeding is caused by anemia in pregnancy, incomplete delivery of the placenta, inability of uterus to contract to stop bleeding or other conditions. Women should seek immediate medical care at the nearest health clinic. Skilled birth attendants and midwives may massage uterus to urge contractions, check for missing placenta, and place pressure on any open wounds.

2) **Sepsis**: Sepsis is blood infection in mothers after childbirth, and it causes 15% of maternal deaths. Symptoms include fever, chills, shaking, rapid heart beat and pain in the body. To prevent sepsis, use boiled, sanitary tools during delivery. To treat, seek medical care immediately.

3) **Eclampsia**: Eclampsia is high blood pressure in pregnancy and causes 13% of maternal deaths. Symptoms include: high blood pressure; swelling of the hands and face; sudden weight gain; blurred vision; severe headaches, dizziness; intense stomach pain. Mothers should visit a medical clinic or hospital immediately.

4) **Unsafe abortion** results in 12%-20% of maternal deaths. Women with pelvic pain, cramps or backache, persistent bleeding, and a soft, enlarged uterus after an abortion should visit a medical clinic immediately.

APPENDIX G: RECOMMEDATIONS FOR FIELD PRACTITIONERS

Below is an outline of recommended questions to consider for traditional practitioners, Western biomedical health workers, and development specialists in their efforts to develop more egalitarian, collaborative dynamics in the field.

THPs:

- Establish need: Survey your people: What services are they looking for? How have their needs changed since displacement began? Where are they going for care? What is lacking from the services they are receiving (humanitarian aid and otherwise)? What challenges to they face in trying to use both? Make sure to seek out hidden populations and needs.
- Convene THPs: Identify and convene other traditional practitioners and TRM advocates to determine whether or not you want to work together to meet populations' need. If yes, establish shared, baseline knowledge & practice, as well as specialised services: What knowledge and practices do you share? What are the variations? What treatments are readily available and safe, and which are more rare and higher risk? How are THPs handling 'new' conditions exacerbated by displacement? What valuable treatments and knowledge risk being lost during this transition period (and how do you best preserve them)? Anticipate disagreements and power struggles, and proactively create space for variation.
- Formalise TRM system: Document shared knowledge and codify through publication (online or printed); outline and create a directory for specialised services. Establish training program to: a) educate and mobilise more THPs to meet population's needs, b) indoctrinate new generation of practitioners (part of political, social, anti-modernisation dynamic).
- Validate: If possible, bring in established experts from a) your TRM system – for example Ayurvedic medical experts from India, and b) TRM/TCAM researchers (can be outsiders) to add to theory, review treatments, validate system.
- Engage outsiders: Once need is established, and initial consensus is reached, approach humanitarian and INGO representatives to alert them to TRM efforts, present TRM services as a resource, and outline opportunities to collaborate (tolerant, parallel or integrative approaches possible). Questions to ask INGO staff/authorities at onset: Are you aware of this population's existing TRM use and/or desire for TRM resources? If not, provide an overview (use validators). Do you feel INGO services meet all population's needs? If not, what is going unmet? Explore both sides' visions for collaboration. Anticipate and prepare for potential unbalanced power dynamic.

- Support: Throughout the process, seek funding and support to maintain operations, secure materials and build infrastructure.
- Additional: how to be politically aware – they want to support the resistance, but also need to be leery of the establishment that may try to limit then. Majority-minority dynamics.

INGO staff and development specialists:

1. Know your beneficiaries: Before entering setting, research population's current health behaviors and systems (consult outside experts as needed). Assess biases related to risks about 'non-Western' systems: How well do you understand this system? Are there redlines related to specific illnesses or practices in this specific setting? How might this proactively be addressed? (To include: suggested reading list on classic TRM safety issues.)
2. Listen: Survey population for health seeking behaviors, use of all forms of health care (physical, mental, spiritual) – engage local population in data collection to reduce bias/facilitate trust. Seek out trusted THPs and encourage them to convene others to determine if/how they want to help meet population's needs. Lay out open-ended questions re: to perceived high-risk practices (see above). Stand back and allow THPs to proceed (beware of power imbalance among THPs and populations with intragroup variation/multiple ethnicities).
3. Facilitate: Begin more formal dialogue with THPs and community leaders about how to address unmet or culturally specific needs. Address assumptions related to risk - bring in outside experts to help resolve as needed.
4. Collaborate: If 'collaboration' is desired (assumed in this scenario), determine best path forward: tolerant, parallel or integrated. Outline options for each track.
5. Empower: Bring THPs to the table for regional and higher level meetings to ensure all perspectives on 'best practices' are included. Explore funding opportunities to support local efforts.

APPENDIX H: PHOTO ESSAYS FROM THE FIELD

Reference: Neumann, C. (2003, Aug.). Vanishing into the Hills of Burma: Traditional Karen Medicine. *Journal of Alternative and Complementary Medicine*, *9*(4), 461-5.

Vanishing into the Hills of Burma: Traditional Karen Medicine

We awake at 7:00am for breakfast and our morning walk to the refugee health clinic, just on the Thai side of the tightly patrolled Thailand-Burma (renamed Myanmar by the ruling government) border. A monsoon-like rain the night before has flooded the fields but the sky is clear and the Burmese mountains look beautiful in the distance. For two weeks now, we have been interviewing patients at this border clinic about their knowledge and use of traditional Burmese medicine. Our project, led by the Global Initiatives for Traditional Systems of Health (GIFTS), Oxford University, is exploring the role traditional medicine plays in refugees' health and well-being.

Once at the clinic we decide to start interviewing a group young mothers about their traditional medicine use. We are finding that the majority of our respondents use traditional medicine before they visit the clinic and many are able give us the names, preparations and efficacy of each medicine. This morning, one woman guides us outside to show us the leaves used in a poultice to reduce fever. As we nonchalantly ask if anyone else in the ward knows anything about traditional medicine we are directed to an old man squatting in the shade out back, smoking cheroot and taking a break from almost a week of accompanying his wife, who is being treating for liver failure. He is wearing a long red longyi (Burmese-style sarong) and his hair is tied in a bun on the top front part of his head.

His wife, children and neighbors, all who've travelled to the clinic together, are strikingly beautiful. Sharp cheekbones, piercing eyes, strong thin bodies and long dark or grey hair. They are all wearing traditional dress the women themselves made, and possess a look of strength and pride, like they have been fighting for many years, through many seasons. They are part of the Karen ethnic minority group, one of the many ethnic groups targeted by the Myanmar junta's violent campaigns, and indeed they have grown tired and sick from the long, hard years. They are happy to tell us of where they come from and gather around as I begin asking questions.

Yes, this man knows something about traditional Burmese, or rather, Karen medicine. He takes

out a journal of notes and starts elaborating on exquisite remedies for menstruation, menopause, tuberculosis, fever, headaches, and mentions his mastery of Burmese astrology as well. He is indeed a medicine man. After some time, he tells us of a very rare and potent oil from a distinct species of Asian tree. One drop to a one jar of honey is strong enough to cure illnesses that involve coughing up blood. This is a very powerful and famous medicine, he reiterates many times, and must be used wisely, as this is also a poison used by hunters on the end of their arrows.

His father, he tells us, was a famous traditional healer in his village, and when he died he donated his medical texts to the local monks. He now has this text, and if we will be here for a while he will cross the border to his village to get it and return to show us all he can in the short time we are here.

I am speechless.

That night, we discuss this proposition. Are we prepared to receive this valuable knowledge? Refugee and migrant populations are highly mobile, and the decision to gather this knowledge could allow us to establish an important connection to this healer, as well as begin a more in-depth look into traditional Karen medicine, before this opportunity – and this relationship – move on, possibly without a trace.

When we return to the clinic the next day we speak with the traditional healer, his name is Dr. Seyaing, about our concerns. The crossing is dangerous, Burmese refugees and migrants are often stopped by Thai police and Myanmar border-guards and forced to pay bribes, or more seriously, are harassed and even jailed. He tells us he has made this crossing safely in the past and is eager to share his knowledge with us, that he would like to make the journey. We give him what he needs for crossing, our contact information in case of emergency, and agree to meet again at the clinic in three days.

In 2001, GIFTS, together with the Burma Refugee Care Project and this clinic, coordinated traditional medicine practitioners like Dr. Seyaing to train clinic staff in safe and effective traditional medicine practices, including how to identify and prepare locally available medicinal plants. This training also included the backpack health worker team, a group of young medics who carry medicines across the border into Burma to treat their severely underserved population. Often, their supplies are confiscated or destroyed by the military, and learning to collect and prepare medicinal plants has been reported to play a vital role in their ability to continue care. The clinic is entirely staffed by Burmese refugees, so these trainings also ensure that valuable traditional knowledge continues to be documented and passed on to future generations of Burmese health practitioners.

The training had been postponed, and we now hoped to rebuild the programme. During Dr. Seyaing's absence, we begin discussing his possible involvement in restarting the programme. One of the hardest things about this work is seeing extremely knowledgeable healers and doctors who have come to the clinic just because they no longer have time to heal themselves or their families. Most of these refugees and migrants are farmers who have fled the fighting and no longer own land, or if they remain on their land are forced to give at least half of their production to the government for no compensation, so must work day and night to survive. Dr. Seyaing is an example - we were told by the clinic that his wife's liver is severely damaged

from chronic hepatitis and she may die soon. When we had asked him about treating his wife with traditional medicine, his face drew a pained expression and he replied that he had been so busy in the fields he wasn't able go out to collect the jungle ingredients, make the medicines and treat her thoroughly himself. Teaching in the training course could allow Dr. Seyaing the time and revenue to heal his own people before they end up as severe cases in Western clinics.

After three days of anticipation, we return to the clinic to learn of traditional Karen medicine. We don't find Dr. Seyaing in the main clinic areas, and begin to ask around. After a number of clues, we hear that he had come, stayed one day and night, decided we weren't coming back, and headed back to Burma. There must have been some misunderstanding. We were devastated. He was such a wonderful man, perhaps one of the most knowledgeable we had met in our two years of work in this region. In a matter of moments he had disappeared, back into the hills of Burma, and we had no idea how or if we would ever see him again.

All of the patients in the ward began describing the bags full of books, robes, plants, roots, branches, oils and powders he had brought with him. That he had come and waited. And then just that morning, one short hour before we arrived eager to see him, he vanished.

As the word circulated that we were searching for Dr. Seyaing, it was revealed that his uncle and cousin were actually staying elsewhere in the clinic, and before long it was agreed that the cousin would cross the border and fetch this traditional doctor back for one more visit. It was three days round-trip to the village, but everyone agreed it was worth it, and with the same routine, we see the cousin off on her crossing.

On the third night, we sit anxiously at our guesthouse awaiting a message, any news of Dr. Seyaing's return. Each border crossing holds so many dangers, if too much more time passes we will need to develop yet another plan. As we sit and discuss, our research assistant bursts through the door: Dr. Seyaing is back! The clinic has just called to say that the doctor has arrived. We rush down, collect some rickety old bikes from the staff at our guesthouse, and away we ride. It's the first really cold night of the season, and the moon is almost full. The road to the clinic passes through the rice paddy fields on the edge of town, and they glow in the moonlight. We can almost see our breath, and by the time we arrive our skin is damp from the early dew of these cool, tropical nights.

Everyone is getting ready for sleep, and each bed in the ward is draped with a different colored mosquito net. It looks beautiful from afar, like a series of thin, delicately veiled canopies. We spot Dr. Seyaing right away, he is bundled up and waiting on the bank where we had our first interview. I have never been to the clinic at night, it is strangely quiet compared to its busy daytime pace, and feels like a peaceful campground.

Without speaking, we find a table and a few chairs, Dr. Seyaing brings out his bags and bundles of ingredients, and we set about logging information about each. After many missed meeting and even more journeys, we are thrilled to finally begin our work together.

As we're going through the leaves, branches, roots and oils, and crowd of interested men and women crowd around. I can't help feeling like we're conducting some midnight gem trade, exchanging and discussing in hushed tones. But the mood is sweet, and everyone seems excited to see how much we really do care to learn about their traditions. Dr. Seyaing had spent four days in the jungle collecting these ingredients for us and was happy to finally successfully pass them on. He had brought us at least a half a cup of the potent tree oil he had told us so much about, and I tell him I feel it is too valuable to give up, that we would only need the smallest amount to begin a traditional medicine catalog and display for the clinic. No, he says, please take it all, it is extremely effective, please use it to cure people... a reminder to turn research into action.

At last, he takes out the medical text passed from his father to the monk, from the monk to him. It is crumbling around the edges and some pages are barely legible. The amount of knowledge is almost overwhelming, but I remember our future partnership and begin to ask the basic questions about the sources of traditional Burmese medicine: does it stem from Indian medicine (Ayurveda) as so many cite? How exactly do you diagnose and what is the treatment process? Do you advise on diet, lifestyle, spiritual health, and how do you incorporate astrology into your care? His answers are clear and simple: his medicine is based in ethnic Karen tradition, not just general Burmese, so for his medicine the relation to Ayurveda is weak. For diagnosis he checks vein and artery pulses in the wrist, examines the face and eyes. Most illness is caused by heat in the body, and most of these ingredients are effective for releasing heat. There are also ingredients for too much cold in the body because cold causes disease as well. Hot or cold illnesses are often caused by eating the wrong foods for your certain body type, if your system is generally cool you must eat warming foods, and vice versa. This pulse diagnosis and hot/cold system are indeed strikingly similar to Ayurveda and Chinese medical, and even Greek humoral theories, which reconfirms how universal some health concepts are.

We ask about the basic principles of astrology, and he tells us that an astrologer is blind to a patient's needs until he reads their numbers, unlike a traditional medicine doctor who can see and feel an illness right away. An astrologer deals with external health and well-being, a doctor with internal health. After calculating a patient's future, he advises the patient on where to go, what to eat, and gives certain warnings health and destiny. Most importantly, once a patient seeks out this advice, he/she must assume the advice to be true and follow accordingly. When we asked about astrology in our first meeting he promptly read all of our numbers - I think back to my reading and remind myself to follow through on his words.

Finally, we propose the partnership with the clinic, and ask if he would like to teach part of the clinic's training programme. He agrees with much enthusiasm, and we begin to discuss some of the details. The revenue from the training would allow him the time and resources to resume treating his family and community, and the opportunity to teach young Burmese medics would ensure that his knowledge is passed on to future generations.

So often in refugee settings, Western medicine dominates, and traditional knowledge is neglected – resulting in the rapid deterioration and even extinction of valuable traditions. In our month survey of patients' knowledge and use of traditional

medicine, we find that networks of traditional practitioners, such as Dr. Seyaing, exist within refugee populations; that refugees want access to these practitioners; and that such access is intimately linked to community health and well-being. Building partnerships with doctors like Dr. Seyaing have the potential of perpetuating valuable traditions, and maybe even more importantly, of improving refugees' health and lives.

Time passes quickly, and before we know it it's time for Dr. Seyaing to leave again, he must return to his wife as soon as possible. We exchange our contact information once more, including my address in New York though he's never even heard of America, agree to meet again in the Spring, say a warm goodbye, and he rides off into the sunrise, back across the border into Burma. Only this time, he leaves us with a trace.

Reference: Neumann, C. (2003, Feb.). Amulets and tears. *Journal of Alternative and Complementary Medicine, 9*(1), 21-3.

Amulets and tears

On a clear Saturday morning, Dr. Gerry Bodeker and I enter a refugee health clinic on the Thailand-Burma border for another day of research on patients' use and perceived efficacy of traditional Burmese medicine. We have been amazed at the extent of use and knowledge these patients have, and look forward to another day of learning.

As we happen into a conversation with a group of young mothers near the inpatient department, a pretty young Muslim woman begins to explain the amulets around her children's necks. Before we know it, she's guiding us to the traditional Burmese Muslim doctor who makes these amulets, through a trash-strewn lot full of small bamboo huts, eager children yelling "hello!" and a small open air Muslim temple, and into his small chicken-coop sized home.

The Muslim doctor, I won't include his name in this story, looks strong but soft around the edges, has a contagious smile, and welcomes us with broken English. His "office" is lined with bottle- and jar-filled shelves, various robes and skullcaps, dictionaries, religious and medical texts, and a strong smell of smoke and fresh cut wood. We sit on the floor and tell him why we're here.

He immediately reaches for the Koran, a Burmese medical text, and a small notebook on Burmese astrology, opens them on his lap and begins explaining the numerology system for the amulet prayers he places around children's necks. The

choice of each amulet verse relates to Muslim numerology and Burmese astrology, corresponding a lucky number to a verse in the Koran. Once the specific verse is identified it must be written on high-quality white paper, wrapped tightly and neatly in plastic, tied up with a thread and worn around a specific part of the body.

Next, he gives us a remedy for transforming enemies into friends by reciting a verse about Joseph, Jacob's beloved son, 21 times over a sweet food as you make it. You must then invite your enemies over, share this sweet blessed meal with them, and "your enemies, they will love you!" From there he moves onto an amulet verse that will ensure a husband's fidelity, one that will ensure prosperity and health, and more.

We could continue on like this for hours, he is a very funny man and enjoys sharing these biblical secrets with us, but we ask him to move from the soul to the body and share some of his medicinal knowledge with us.

For toothaches, he tells us, crush Kaut Bahn nut, pepper, a sour stone from the market, camphor, nutmeg, clove and Tote Tar into a powder; mix it with honey and rub it on your sore tooth. We lick the sour stone he is referring to and it sends an immediate twinge to the jaw. Sour indeed.

He tells of a remedy for blurry vision and high blood pressure and we ask him to explain. He reaches for my hand and in my palm he begins mixing the ingredients: a ground betel nut and herbal mixture and a white liquid of lime base, rubbed together to create a paste. The reaction is strong and starts to burn a bit. Then he presses my hand into a slightly open fist and tells me to stick my nose in and inhale. Yow! My nose stings and eyes water immediately. He instructs me to keep inhaling until my eyes really start streaming tears. Uh-uh, I excuse myself and decide once was enough with this potent mixture. So the sweet young Muslim woman pulls my hand over and starts sniffing. Sure enough, her eyes start streaming tears and she looks up at us, blinks, and smiles.

He continues with remedies for tuberculosis, back pain, hair growth, menstrual cramps, liver health, kidney infection, and oedema. For respiratory conditions, he advises a combination of pepper, dried catkins, dried ginger, liquorice and medicinal salt. As each medicine is made, a verse from the Koran must be repeated to ensure its potency.

One of our main research goals is to discover how these medical traditions are preserved now that these Burmese people are living as refugees, with little access to their home doctors, villages and jungles. He tells us that some of the plants and minerals he needs to produce his medicines are indeed endemic to certain jungles in

Burma, and very difficult to access now that he is in Thailand. He does say that parts of India and Malaysia share a similar geography with Burma so it is possible to import from there, but now that he is in Thailand he tends to rely on local ingredients. In fact, he tells us he never leaves his home for security reasons and requires patients, as well as ingredients to come to him. We can only hope he is able to maintain.

His knowledge is obviously very broad and we ask him where and how he studied. Before arriving in to this border town three years ago, he tells us, he spent 20 years roaming through Burma as a travelling doctor, learning, teaching and treating. As he was travelling through village near Bago, he came upon a family of descendents of the royal family who held part of the handwritten palm leaf medical texts passed down from King Thibaw's palace minister and doctor, U Po Hlaing. U Po HLaing had travelled to India to learn their Ayurveda practices, returned to the palace and before he died, and wrote Burma's master medical texts. The entire text was written in verse so it might be memorised and passed down through the generations fluently.

Dr. NY had memorised the text, and handed me a verse he had copied on a scrap piece of paper. A short souvenir from a long legacy. We thanked him very much for his time and made a date to visit again before we leave. A doctor of Muslim and Burmese descent, using the Koran, ancient palm leaf texts and the plants around him to turn foes to friends and cure blurry vision with a few whiffs in the hand. It is clear that we have just begun.