Critical Analysis of the Efficacy of Task-Shifting in Two Post-Earthquake Humanitarian Crisis Sites: Haiti and Nepal

Elle Gault
Global Health Honors Thesis
Spring 2016

Dr. Deborah Jenson
Dr. Brandon Kohrt
Dr. Kearsley Stewart
# Table of Contents

Acknowledgements ................................................................. 3  
Introduction ........................................................................... 4  

Chapter 1: Defining Task-Shifting ........................................... 16  
  5 x 5 Method  
  Apprenticeship Model  
Chapter 2: Infrastructure pre-earthquake in Haiti and Nepal ........ 26  
Chapter 3: Task-Shifting Interventions in the Post-Earthquake Context 41  
Chapter 4: Challenges of Implementation .................................. 50  
  Sustainability  
  Re-Traumatizing Lay Workers  
Conclusion ............................................................................  
End Notes  

Acknowledgements

I have multiple people to thank for their contributions and development of this thesis. First, thank you to my advisor Dr. Jenson whose insights and mentorship have helped me grow as a writer, thinker, and global health student in general. Thank you to Bonnie Kaiser, Dr. Benjamin Reese, Hannah Richards, and Sauharda Rai, who have met with me to help me better understand the Haitian and Nepali contexts of health care. I want to thank my thesis committee for being apart of this project. I would especially like to thank the Duke Global Health Institute not only for the opportunity to write this thesis, but also for their funding that gave me the first opportunity to visit Haiti, where I was first faced with the problem of mental health interventions following the earthquake. I also want to give thanks to Family Health Ministries for providing me the opportunity to live and work in Haiti for two months.

I also want to thank my family for their constant support. I would not have written this thesis, let alone be at Duke University without their help.
A Critical Analysis of the Efficacy of Task Shifting in Two Post-Earthquake Humanitarian Crisis Sites: Haiti and Nepal

Introduction

Natural Disasters: A New Normal

In the past few decades, natural disasters have grown in frequency, severity, and lethality (Changon et al., 2000). The devastating effects of earthquakes, floods, and hurricanes impact low-income and developing countries the most. The Red Cross and Red Crescent Societies found that in the decade leading up to 2001, low income countries reported 1,052 deaths for each natural disaster, where as only 23 deaths were reported in high-income countries (O’Brein et al., 2006). In a 2005 article, Nepal and Haiti were both in the 10 highest risk nations for deaths due to natural disasters (Kahn, 2005, p272). Tragically, both countries have been tested by severe earthquakes in the last 6 years.

Complex vulnerabilities compounded through long-term exposure to adversity in low-income nations profoundly influence how a society handles a natural disaster in terms of "preparedness." Terry Cannon, in his research at the University of Greenwich in London, notes that:

Vulnerability is a characteristic of individuals and groups of people who inhabit a given natural, social and economic space, within which they are differentiated and according to their ... class, gender, and ethnicity. Differences in these socio-economic factors result in (disasters) having a different degree of impact. (1994, p.19).

Low-income countries suffer the most in terms of economic impact as well as lives lost to natural disaster. Worldwide, natural disaster damages have been estimated to cost somewhere between $94 billion and $130 billion each year (Kousky, 2012),
although such figures would be much higher if less extreme events due to climate change were factored in. The chart below illustrates the financial burden of designated natural disasters worldwide.

**Figure 1. Annual costs of natural disaster events worldwide.** Kousky 2012.

![Chart showing annual costs of natural disasters worldwide](image)

After a disaster strikes, humanitarian aid is sent to provide much needed financial assistance, but the concept of “disaster mental health” remains new and has been mostly ignored by international humanitarian organizations. As disasters become more common, aid organizations are stretched thin across different geographical boundaries, and governments of countries effected struggle to provide adequate mental health care and support to its residents. Dr. Deborah Jenson poses an important question in her conference paper, “Global Health in the Age of the Anthropocene”: “In a health care field that currently involves intensive travel to global locations to intervene in humanitarian emergencies, what kinds of epistemological questions should be asked about the potential for serious disruptions
of access by travel or even virtual technology to remote global locations?” (2016). As countries become dependent upon this foreign aid, how are their populations getting the help they need after disasters? Wen-Ko Hsu and his colleagues claim that “short term developmental strategies” that are common post-disaster strategies actually aggravate the impact of disasters (2012, p1056). That is due to the high rates of urbanization, environmental deterioration, and industrialization, which all provide barriers to creating sustainable, long-standing programs. The lack of disaster preparedness has been devastating for these populations. Specifically in this thesis, I am investigating how lack of planning and previous infrastructure in Haiti adversely affected post-earthquake mental health interventions, in comparison to Nepal.

**Case Studies**

On January 12, 2010, a 7.0 earthquake with a depth of up to 8.1 miles struck the central and Southwest regions of Haiti, resulting in up to 222,653 deaths and 310,928 sustained injuries according to the 2013 Cianelli et al study. (Death tolls have ranged from 100,000 to 300,000 across studies). Although the original quake only lasted about 30 seconds, 54 aftershocks registering greater than a 4.0 on the Richter’s scale followed the initial disaster (Katz, 2013, p. 27). Overall, more than 300 million people worldwide were affected by the disaster (Katz, 2013, p.3). It is estimated that the damage to the country’s infrastructure was more than 100% of the countries GDP (Cavallo & Noy, 2010). After the earthquake, foreign aid flooded into the country to provide immediate relief. $5.2 billion was dedicated to the emergency relief effort, although very little of that ever reached Haiti, and a very few funds were dedicated to mental health care efforts (Katz, 2013, MSF, 2012). Known as "Goudou Goudou" by
the Haitian people, the earthquake was named for its onomatopoetic sound, the sound that everyone in Haiti now categorizes as the earth shaking. What lasting impact did Gougou Goudou have on the people of Haiti exactly? Danny Laferrière, in his memoir *The World is Moving Around Me* said:

We...miss our old lives. Life before January 12, 2010. To be exact we enjoyed two-thirds of the day of January 12, since the earthquake occurred at 4:53 p.m. Up until 4:52, we lived carefree lives. We had one minute left. What is a minute worth? A lot, since the earthquake didn’t even last one minute. (2013).

Among the earthquake’s lasting and pervasive consequences, causing extreme mental distress for many of the survivors, was a desperate need for mental health services that strained the already limited resources in the country (Cianelli et al., 2013).

On April 25, 2015 at 11:56, a 7.9 magnitude earthquake hit Nepal, killing 8,316 people to date (IASC, 2015). Only 2 kilometers deep, the shallow depth of the earthquake was compensated by its wide reaching destruction across multiple districts. On May 12th, there was a second earthquake of a 7.3 magnitude, affecting mostly the same districts hit by the previous earthquake (Nepal Desk Review, 2015). Known as the Gorkha earthquakes, their recentness leaves us with incomplete data on total damage, lives lost, and relief status.

Both earthquakes had predictably devastating effects on these notably lower income countries, resulting in huge influxes of humanitarian aid into the country. Even with aid efforts, low-income countries affected by large-scale disasters require major adaptations from their populations, which can result in considerable psychosocial distress (Schinina et al., 2010). It has also been found that earthquake survivors typically present a significant symptomatic response (like anxiety, loss of sleep, and depression) as a result of the shocking traumatic nature of the event, and
even more so for those whose homes or possessions were destroyed (Kokai et al., 2004). Although mental health was not the first priority for many stakeholders involved, it became clear over time that many citizens in these countries needed access to mental health care (Nicolas et al., 2012).

Haiti is located in the Caribbean, and occupies the island of Hispaniola with its neighbor the Dominican Republic (WHO, 2010). Originally colonized by France, Haiti was one of the first colonies to win its freedom the colonial power, in 1804, and the first colony whose slaves won their own freedom from enslavement; it became the first independent Black state in the New World (Nicolas et al., 2012). Although free, the “black Republic” experienced many obstacles to continuity of infrastructure and institutions that had been built by the former colonists and slave owners. In addition, foreign governments and powers have continuously intervened in the country, exploiting Haiti for their own profit (WHO, 2010). For example, in 1825, 21 years after Haiti became a free republic, France demanded that the Haitian people repay the country for lost property (both land and slaves). Haiti was the only former French colony required to pay reparations for its free (Edmonds, 2012). The repaid debt cost the country the equivalent of $21 billion U.S. dollars today. The United States, concerned about a black, free republic so close to its own shores, has a history of foreign policy intervention, including interfering in political transitions and military occupations. In 1990, the Haitian people had what some political monitoring organizations judged to be their first free and fair presidential elections, electing Jean-Bertrand Aristide, not the U.S. backed candidate (Edmonds, 2012). Aristide was overthrown in a military coup, and four years later was the candidate favored by the
US. President Bill Clinton created a delegation he dispatched to Haiti to negotiate the terms for Aristide’s return to office (Goodnight & Olson, 2006). Using the political turmoil of the 1990’s as a rationale, U.S. republicans justified ending the $50 million dollars promised to Haiti in aid funding (Edmonds, 2012). Struggling both politically and economically, Haiti today is frequently described with the epithet “The poorest country in the Western hemisphere.” Facing this adversity, many Haitians turned to religious or spiritual traditions or new religious affiliations. This became critical for the evolving perceptions of mental health, and for the practice of mental health care in the country.

Mental illness is often seen as a spiritual or religious affliction in Haiti. The country has a Catholic majority and a growing protestant minority, in which several faiths operate in systematic antagonism to Vodou, in the belief that it represents a curse. The demographic of Vodou practitioners, estimated at something under 50%, clearly overlaps to a considerable degree with the nearly 100% of the Christian-identified population. Vodou represents a broad base of cultural traditions, dietary approaches, holidays, health practices, and “superstitions,” even among non-practitioners. Vodou has a profound influence on Haitian culture and identity. Nicolas Vonarx, a PhD professor at the Université Laval Québec, spent 16 months in Haiti over the course of a decade, studying Haitian Vodou and its connection to illness and healing. By gathering data through interviews and observations he was able to conclude:

Vodou’s connections to illness go(es) beyond a care-giving dimension identified for most religions. Instead, illness management is at the heart of the form of vodou found in the Haitian countryside where it is a health care system grounded in a unique ontology. What is more, there is a magical
dimension to the vodou health care system in cases where illness is caused by
to the vodou health care system in cases where illness is caused by
counter the attack by
Vodou priest’s role is therefore to counter the attack by
dealing with the pathogenic causal agent central to the explanation for the
illness (2011, p50).

Oftentimes those who are affected by a mental illness are seen as cursed by
Vodou spirits, either sent by someone else, or in retribution for not paying homage to
a familial ‘guardian angel’ (WHO, 2010). The concepts of magic heavily influence
Haitians’ ideas of “mind illness,” and how these illnesses are seen in the community
(Kaiser & McLean, 2015). Often stigmatized, individuals with mental health disorders
seek help from religious leaders because these disorders are categorized strictly as a
spiritual or family problem. Vodou priests and priestesses use their knowledge of
vodou to heal illnesses, a treatment which typically focuses on spiritual or familial
relationships that are suffering. Vonarx further found evidence of these healing
practices in the overall conception of health:

There is a religious dimension to the vodou health care system in cases where
the origin for the illness, the world order, and a way of living enter into the
[priest’s] explanation for the illness, and a relational balance must therefore be
reestablished with the ancestors and lwa (guardian angel). In such cases, the
remedy is relationship, and vodou aims to reintegrate the sick person into a
network of sociosymbolic relations responsible for illness, well-being, and
quality of life. The vodou health care system is combined with an individual
and family cult of ancestor and lwa worship, which the (priest) organizes to
smooth over disturbed relationships. (2011, p.50)

Since, along with naturopaths (“dokte fèy”), Vodou priests and priestesses
have served as traditional healers in Haiti, they represent the largest sector of lay
mental health care and treatment, especially for rural populations (WHO, 2010).
Although formal hospitals and clinical care settings exist (even if rare), mental health
care has only been included in many of the country’s clinical settings earlier in the
20th century, for reasons I will address in Chapter 2. In the time period just prior to the earthquake, most of the small demographic psychiatrists in the country were employed by the two public psychiatric hospitals in the greater Port-au-Prince region, Hospital Beudet in Croix-des-Bouquets and the Mars and Kline Psychiatric Center (Cianelli et al., 2013). The centralization of mental health services in the capital has left large areas of the country without formal mental health care. In addition, the government has yet to initiate or distribute a mental health policy, lacking both planning and infrastructure for formal mental health care (Schinina et al., 2010). The lack of clinical treatment is not only a consequence of the dearth of professionals, but could be due to the difficulties Haitians may have speaking about personal issues with professionals (McShane, 2011). Due to these factors, more traditional healers and religious leaders have served as the main form of care for those who are sick.

Haiti has sometimes been called a “Republic of NGO’s,” since its poverty, combined with its proximity to United States, has made it a widespread object of humanitarian attention. By contrast with Haiti, Nepal is a landlocked country located in Southeast Asia, but it also plagued by a large low-income population and poor health infrastructure (Nepal Desk Review, 2015). Nepal is a country of diversity, home to 125 ethnic groups, 10 religions, and 60 languages spoken in the country (Nepal Desk Review, 2015). Originally colonized by Britain, Nepal served as a country of exports, but its neighbors India and China currently exert a dominant cultural influence, in part due to both countries interest in Nepal; China for its own self interest in security, and India because of the rich resources in the country (Dabhade & Pant, 2004). In the 1950’s, China began to establish diplomatic relations, and India
signed the Treaty of Peace and Friendship acknowledging both respect and sovereignty of their counterparts. The strong cultural influences of the two countries, especially that of the communists in China, inspired the beginning of the Communist Party of Nepal Maoists. In 1996 a civil war between the Government in Nepal and the People’s Liberation Army (PLA), lasting until 2006 (film). In 2006, Nepal established a shaky peace agreement, but the country is still managing political unrest (Koenig, film, 2013). Known as the “People's War”, psychological problems among the citizens of the country became prevalent, bringing more attention to mental health treatment. Most specifically, youth were effected, due to the recruitment of over 9,000 child soldiers to the PLA (Nepal Desk Review, 2015). By using tactics like kidnapping children, promising revenge for family members killed, and offering power and protection, the PLA was able to recruit young children to fight for their cause (“Returned: Child Soldiers of Nepal's Maoist Army,” film). After years of abuse in the army, children who fought for the PLA were stigmatized and marginalized from communities in Nepal (Kohrt et al., 2010). Many of these child soldiers suffered from high levels of PTSD and depression. Although there was extreme psychological distress, most biomedical care existed in forms of interventions or non-profit programs.

Brandon Kohrt, along with several colleagues, conducted pre- and post-conflict mental health assessments in Jumla, Nepal, a small rural community (2012). The baseline study was conducted in 2000, using the Beck Depression Inventory and the Beck Anxiety Inventory to evaluate depression and anxiety among adult members of the community. After the end of the war, the research conducted post-conflict
assessments from 2007-2008 using the same evaluation tools. The research team discovered that conflict was a significant predictor of anxiety, establishing a strong correlation when controlling for other stressful events (2012). Anxiety rates rose from 26.2%-47.7%, a significant jump. Depression rates also increased, but they found it was not associated with war trauma. The graphs below visually illustrate the differences in pre- and post-conflict assessments in each age group, conducted in Jumla, Nepal.

Figure 2. Tables illustrating Kohrt et al.’s findings on depression and anxiety, pre- and post-conflict Jumla, Nepal.

Although there was some increase in distress due to the nature of the civil war, depression in Nepal did not rise after the end of the conflict. Kohrt’s study suggested that low-income countries might have high prevalence rates of mental health problems prior to conflicts due to preexisting social, economic, and cultural conditions of adversity (2012). Because of the political violence Nepal faced, multiple organizations created mental health interventions in order to treat and relieve mental distress in the country.

Manifestations of mental health in Nepal are influenced by both religious and “magical” beliefs (Brenman et al., 2014). Because health is contextualized in very
complex forms including the “mind, body, and spirit”, mental health is not defined by Western categories of illness (Nepal Desk Review, 2015). Women in distress refer to mental illness as “tension”, meaning being distracted, worried, concerned, or other stressing symptoms (Clarke et al., 2014). Other studies have identified “numbness and tingling” or “dyspepsia” as expressions of distress (Kohrt & Hruschka, 2010). These expressions of mental health and illness, or “brain mind” are seen as incurable and are much more stigmatized than physical disorders (Kohrt & Hruschka, 2010, Nepal Desk Review, 2015). Thus, the informal sector is the primary source of care providers for problems that might fall under the rubric of mental health, whether through individuals’ social networks, or recourse to traditional healers (known as dhamis) (Brenman et al., 2014).

As far as psychiatric biomedical forms of care are concerned, Nepal has one government hospital in Kathmandue, and four private hospitals in Bharatpur, Pokhara, Nepalgunj, and Biratnagar, but they are located in strictly urban areas (Nepal Desk Review, 2015). In 1996, the National Health Policy of Nepal was created to decentralize healthcare in order to reach rural populations, but only .08% of Nepal’s national budget is dedicated to providing mental health care, limiting the resources that can be dedicated to mental health treatment (Jordans et al., 2012): in effect, one cannot decentralize something that is not centralized. Other than hospitals, there are no structured clinical resources for mental health care in Nepal, but there have been various efforts made toward creating community health delivery programs with the use of lay workers (Jordans et al., 2013). The PRogramme for Improvement of Mental health carE (PRIME) is doing just that, by working in four
countries (including Nepal) to scale up a new mental health care approach by using lay workers (Mendenhall et al., 2014). The Prime initiative is collaborating with TPO in Nepal, an organization previously involved in mental health interventions treating younger populations (Kohrt et al., 2011).

How can we account for differences between Haiti and Nepali post-earthquake interventions? Haiti arguably was less prepared for its earthquake than Nepal was for its post-conflict earthquake due to Nepal’s pre-existing program infrastructure. For example, in 1997 the Nepali government adopted a mental health plan, whereas Haiti has yet to do the same (Luitel et al., 2015). Nepal’s inclusion of a mental health plan into its bylaws integrates mental health care into primary care settings through task-shifting (Luitel et al., 2015). NGO’s and organizations in Nepal have also prioritized mental health care after the People’s War (Nepal Desk Review, 2015).

Although Haiti has faced political adversity throughout its history, mental health did not receive the same attention that it did in conflict and post-conflict Nepal. Mental health is not given adequate funding in either country, but Nepal has facilitated international organizations and non-profits initiatives that “scale up” services in Nepal, specifically task-shifting interventions (Mehandall et al., 2014). I have identified task-shifting interventions as a critical intervention model for mental health care infrastructure, due to its credibility, feasibility, and ability to reach large sectors of the population. Further explanation into this hypothesis will be explored in the first and second chapter of my thesis, looking at more case studies, and data driven results.

In writing this thesis I have done an extensive review of relevant literature on
topics of Nepal, Haiti, mental health concepts in both countries, and specific task-shifting interventions enacted post-earthquakes. To supplement the literature review, I conducted interviews with relevant sources that had their own personal experiences with Haiti and Nepal both before and after the earthquake. First, I want to explore task-shifting, and exactly why I identified it as a critical component of health systems in a pre-disaster context.

Chapter 1: Why are Task-Shifting Models Important?

Defining Task-Shifting

Task-shifting, also referred to as task-sharing, is the transfer of a task normally performed by a physician or trained professional, to a non-specialized person (Mendenhall et al., 2014). A “lay person” or non-specialized person, has been identified as someone who: performs functions related to health care delivery, is trained in some way in the context of an intervention, but has not received formal or paraprofessional certifications of educational degrees (Lewin, 2006). The goal of task-shifting is to use existing resources more efficiently, in order deliver more services to people in need (WHO, 2008, 7). In addition, the model gives local laypersons not only responsibility, but also an important place in the community. Rather than “outsiders” delivering much needed care, the local community members are able to come into their roles as health care deliverers.

The method first emerged in the Democratic Republic of the Congo in the 1970’s, due to a shortage of available physicians (Joshi et al., 2014). In the 1990s, lay health worker programs became popularized due to the AIDS crisis (Babigurmira, 2006). The formal health care system became overwhelmed from the AIDS epidemic,
resulting in community-based organizations stepping in to implement task-shifting models to provide some basic level of care (Lewin, 2006). After the World Health Organization (WHO) advocated for the task-shifting model in 2006, emphasizing “community involvement” and its effective approach to health care, task-sharing approaches were frequently investigated as possible intervention tactics (Lehman et al., 2009).

Task-sharing is now used as an approach for multiple different disease categories, all over the world (Eaton et al., 2011). By training non-specialized workers, countries can expand their healthcare workforce in order to “scale up” and provide necessary health services (Kazdin & Rabbitt, 2013). This can include employing health care workers in different sectors, collaborating with other professionals (like social workers or teachers), strengthening mental health awareness in general, etc. (Kakuma et al., 2013).

**Task-Shifting Models**

**5 x 5 Model**

The 5 x 5 model is a task-sharing approach, where community health workers integrate mental health care into preexisting local treatment practices using five key implementation strategies (Belkin et al., 2015) to integrate stakeholders at every level in low resource settings. They are: assessing context, identifying priority care pathways, specifying decision support tools, using quality improvement practices, and planning for sustainability and capacity building (Belin et al., 2011). The model creates a “planning checklist” for the stakeholders to coordinate efforts in collaboration (Belkin et al., 2015). The goals of the 5 x 5 model are to first create a
culturally competent program, with proper support tools, that can hopefully become a more sustainable project.

In addition to the five-implementation rules, the framework calls upon five skills that should be utilized when creating the intervention (Figure 1). These skill sets are broad skill sets designed to further develop separate pathways to create culturally competent programs.

![Diagram of skill sets](image)

**Figure 3. Belkin et al., 2011.**

**Apprenticeship Model**

The apprenticeship model for task-sharing is based on a simple principle of using trained health care providers, along with a team of local supervisors, to train and monitor lay individuals who provide mental health care for the community. The best practices for apprenticeship models are ones that are context specific and make use of local individuals in the intervention (McLean et al.). The apprenticeship model uses three main groups of individuals; trainers who are experts to consult on the project, supervisors who are typically from the project area but are given an advanced role, and counselors who are lay individuals chosen to provide care to the
The “trainers” in these programs are typically highly educated with clinical backgrounds, who have the ability to instruct the apprentices on proper health care techniques. Eventually, the supervisors play the more prominent role in teaching and monitoring the lay health workers, once they themselves are trained. This is a much more common task-shifting approach than the 5 x 5 model, but requires more supervision and involvement from trained clinicians.

**Why is task-shifting important?**

Due to the small numbers of Western-style biomedical practitioners in global environments, many lower-income countries adapted the task-sharing model, establishing a more permanent role for lay individuals in the health care system (Crisp & Chen, 2014). WHO proposed task-shifting models would help contribute to achieving several Millennium Development Goals in these developing countries and officially adapted the model to encourage “scaling up” community health worker programs in their Mental Health Gap Action Programme (mhGAP) (Campbell & Scott, 2011, 125, Lund et al., 2012). There are many positive reasons why the WHO, and other health organizations around the world are encouraging the implementation of task-shifting models.

Task shifting has been shown to rapidly increase access to services in order to reach individuals in need, while still providing good health outcomes (WHO, 2008). Many task-shifting programs that use community health workers have been able to reach vast geographical and populated areas, and even become nation-wide projects. For example, the Programa Sauda da Familia in Brazil provides family health services to more than 25 million people, originally serving less than half of that (UNICEF,
The Atencion Integral a la Ninez programme in Honduras and the kader system in Indonesia are also national programs that use community health workers (UNICEF, 2006). In Zambia from April 2004, to November 2005, the Ministry of Health used non-physicians clinicians to provide primary care and treatment for HIV/AIDS (Morris et al., 2008). The PEPFAR program provided funding that enabled the Ministry of Health to train non-physicians to manage and treat HIV using anti-retroviral medications. Originally, only private medical practices provided care to the 16% of the 11.5 million population infected by the disease, leaving only the wealthy in the country with access to care (Morris et al., 2008). The new program allowed for 18 primary care facilities to provide treatment, and over 21,755 adults were enrolled in the treatment program (Morris et al., 2008). Figure 4 below shows the dramatic increase in the number of patients receiving treatment.

Figure 4. Number of patients who received ARV treatment over the course of the intervention.
Morris et al. 2008.

The researchers concluded that the massive scaling-up of the program using non-specialized persons not only dramatically increased access to treatment, but still produced good clinical outcomes for patients. Of the 12,369 patients who were at risk, 1120 died during the treatment, but most were found to have low CD4 cell count when first starting the program and had died within the first three months of starting ARV treatment. The above study illustrates a successful and dramatic scaling up of task shifting, improving access while still providing quality care.

In addition, the cost-effective nature of scaling up non-specialized workers contributes to increased access in lower income countries (Kakuma et al., 2013). Lay health workers could potentially lead to lower intervention costs because the care
providers work at a level closer to the consumers (Lewin et al., 2006, 35). In addition, not all community health workers are compensated monetarily, but oftentimes volunteer to be apart of health interventions. Many times these volunteers are more motivated by certifications, or recognition for their new skills (Kaiser & McLean, 2015). Costs can also be evaluated in many different ways, referring to quality of life, or workdays lost/gained from health issues. Christine Buttorff and colleagues evaluated the economic costs of task-shifting interventions to treat mental disorders in India (2012). Using a randomized control trial method, patients diagnosed with either depression or anxiety were assigned to a control or intervention model at 24 different public or private primary care facilities. Buttorff found that in public facilities costs were much lower in both time and costs incurred on the health system, but also resulted in better health outcomes when using a task-shifting model compared to the control. Although there were no changes in private institutions, task-shifting interventions in public facilities have the opportunity to be both more cost-effective and of higher quality than other treatment methods.

Lastly, task-shifting has become an attractive intervention due to its demonstrated efficacy in different cultures and geographical locations (Eaton et al., 2011). Task-shifting models have been used for decades all over the world, effectively treating patients of different socioeconomic, cultural, and geographical backgrounds. Because task-shifting interventions have a basic model, the intervention can be modified to be culturally competent and effective for its specific population. It is significant to involve local laypeople because they are more sensitive to local cultural idioms and signals of distress. As Bonnie Kaiser and Kristin McLean explain in their
chapter in *Global Mental Health: Anthropological Perspectives*, through training and understanding of culture-specific idioms, a layperson can identify mental illness symptoms in their populations (2015). Task shifting models have been used for different disease treatment in addition to different populations, but due to the burden of mental health disorders and shortage of mental health care professionals, task shifting models have over time become more pertinent in treating mental disorders.

**Drawbacks to Task-Shifting**

There is another critical point that must be discussed about task-shifting. The term “layperson” used in task-shifting programs may be a disservice to those employed in the program. “Lay” knowledge is seen as distinct from more elite “medical” knowledge, creating a strict hierarchy between professionals (Bolam et al., 2003). Oftentimes, these “laypeople” already have previous existing expertise in other fields, and are employed to train for additional participation in programs. For those who are “laypeople” without any previous training these programs do provide some semblance of specialty and expertise, and are seen as professionals by their peers in the community, and yet they may remain in the “layperson” category. Unfortunately, because task-shifting interventions are often a combination of western practices and culturally sound idioms, it is the western professionals who choose which expertise “matters”. This suggests some residue of the idea of the “white savior” in these lower-income countries, and of an erasure of the identity. Task-shifting holds the potential to perpetuate inequality among workers, even though many task-interventions can be close to the community and progressive in nature.

**Task-shifting and its role in the provision of mental health care**
Task-shifting models have heavily influenced models of mental health care in low-resource countries. Mental illness accounts for 10% of the global burden of disease, 75% of those cases in developing countries (Mendenhall et al., 2014). A total of 700 million people worldwide are affected by mental disorders (Gilbert et al., 2015). Overall, mental health disorders contribute to one-third of the years lived with disability (YLD) among adults (Murray et al., 2011). It is predicted that by 2030, depression will be the number one cause of disability, ahead of all other communicable and noncommunicable diseases (WHO, 2008). “Mental disorders are more impairing than common chronic medical disorders, with particular greater impairment in the domains of home, social, and close-relationship functioning”, creating a high burden for individual and family suffering, and financial costs (Kazdin & Rabbitt, 2013, p. 170).

Mental illness is a considerable economic burden, estimated to cost $2.5 trillion worldwide each year (Gilbert et al., 2015). And yet, there are limited funding resources dedicated to mental health treatment. Barnabas Gilbert and his colleagues found that aid from multilateral organizations, health initiatives, and private donors who sponsor health care initiatives, do not provide enough development assistance for mental health care (2015). Using the Creditor Reporting System, Gilbert found that development aid from these groups had increased over a six-year period from 2007 to 2013, but not enough to provide significant assistance (2015). These findings illustrate the limited funding sent to low-income countries, where only $.20 US per capita is spent on mental health expenditures (WHO Mental Health Atlas).
A large treatment gap exists for mental health care, worsened by disparity between disease burden and the availability of health workers in different country income groups (Crisp & Chen, 2014). In 2011, high-income countries had an average of 29 psychiatric nurses per 100,000 people, compared with only .42 psychiatric nurses in low-income countries (Kakuma et al., 2013). Most mental health treatment occurs in developed countries, where as few as 2% of people are treated in low-income countries, even though most cases reside in these regions (Eaton et al., 2011). The limited clinical resources available in each of these countries are demonstrated in the table below.

**Median number of health professionals per 100,000 by country income group (based on WHO Mental Health Atlas).**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>0.06</td>
<td>0.05</td>
<td>0.05</td>
<td>0.16</td>
<td>0.16</td>
<td>0.42</td>
<td>0.04</td>
<td>0.04</td>
<td>0.02</td>
<td>0.03</td>
<td>0.04</td>
<td>0.01</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.00</td>
<td></td>
<td>0.01</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower middle</td>
<td>0.90</td>
<td>1.05</td>
<td>0.54</td>
<td>0.90</td>
<td>0.00</td>
<td>0.29</td>
<td>0.60</td>
<td>0.60</td>
<td>0.14</td>
<td>0.30</td>
<td>0.28</td>
<td>0.13</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.01</td>
<td></td>
<td>0.13</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper middle</td>
<td>2.40</td>
<td>2.70</td>
<td>2.03</td>
<td>2.70</td>
<td>5.70</td>
<td>5.35</td>
<td>2.92</td>
<td>2.13</td>
<td>1.47</td>
<td>1.42</td>
<td>1.50</td>
<td>0.76</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.23</td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>9.00</td>
<td>10.50</td>
<td>8.59</td>
<td>33.50</td>
<td>32.93</td>
<td>29.15</td>
<td>26.70</td>
<td>14.00</td>
<td>3.79</td>
<td>25.50</td>
<td>15.70</td>
<td>2.16</td>
<td>1.51</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>World</td>
<td>1.00</td>
<td>1.20</td>
<td>1.27</td>
<td>2.00</td>
<td>2.00</td>
<td>4.95</td>
<td>0.40</td>
<td>0.60</td>
<td>0.13</td>
<td>0.30</td>
<td>0.40</td>
<td>0.24</td>
<td>0.06</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number</td>
<td>182</td>
<td>183</td>
<td>178</td>
<td>164</td>
<td>172</td>
<td>158</td>
<td>164</td>
<td>173</td>
<td>147</td>
<td>147</td>
<td>157</td>
<td>129</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>119</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Table 1. Kakuma et al., 2013.*

In low-income countries, the prevalence of mental illness coupled with the lack of resources (monetary and physician shortages), endangers societal functioning (Kazdin & Rabbitt, 2013). This is exactly why task-shifting models have become critical for mental health care in low-income countries.

Although there is not much quantitative evidence available demonstrating the efficacy of task-shifting mental health services, small-scale research studies are
starting to show successful outcomes (Mendenhall et al., 2014). Commentary provided on the WHO 2006 report said:

Reviews of evidence consistently show that delegation of tasks, whether from doctors to non-physician clinicians, including nurses from nurses to nursing assistants or aides or to non-professional or lay health workers and patients can lead to improvements in access, coverage and quality of health services at comparable or lower cost than traditional delivery models (Lehman et al., 2009).

The report also cautioned that the framework must issue from the government, along with support from stakeholders, for adequate commitment to the political and financial obligations required to create sustainable programs. It has been found that widespread task-shifting programs typically exist where there are previous or strong systemic foundations for care (UNICEF, 2006). Unfortunately, very few low-income countries have strong mental health care systems in place, especially before critical periods like post-conflict, or post-disaster. Countries that have proactively established formal mental health care fare better in terms of providing care in critical times when its citizens are most in need. The next chapters are an in-depth analysis of this phenomenon.

**Chapter 2: Pre-Earthquake Mental Health Care Infrastructure**

**Haiti**

**Early Haitian exploration of mental health**

Haiti has a history of social problems and political violence, in light of which it was particularly problematic that it had limited mental health infrastructure when the earthquake struck on January 12, 2010 (McLean et al., 2015). Paradoxically, Haiti was once a key innovator in precisely the global mental health theory and practice
that were needed in the aftermath of disaster. As Paul Farmer notes in his chapter, “The Birth of the Kilink: A Cultural History of Haitian Professional Psychiatry,” Haitian psychiatrists understood “the social construction of illness categories” and how “culture shapes psychopathology”, making them “far more familiar with anthropological concepts than” their western counterparts” (1992, p. 251). Unfortunately, this original exploration of global mental health faded over time as Haitian psychiatrist Louis Mars fell from popularity, due to his association with the Duvalier regime and to problems with his hospital (discussed further below).

The first Haitian forays into mental health care and its characterization in local cultural context started in 1944, with Mars’ examination of the “crisis of possession” in Vodou. The son of a major Haitian anthropologist, Jean Price-Mars, Louis Mars was one of the first psychiatrists worldwide to merge anthropological and psychiatric methodologies. In fact, the French anthropologist and psychoanalyst who is conventionally credited with inventing the field of ethnopsychiatry, Georges Devereux, actually wrote a preface to Louis Mar’s second book, explaining that it was the first book length publication in the field Louis Mars had dubbed “Comparative Psychiatry” (Jenson, 2015).

In his voluminous lifetime corpus of published research, Mars was able to characterize Haitian conditions in terms of a combined vocabulary of religious states, cultural and socioeconomic status, and neurological or psychiatric problems. He claimed: “the voodoo-like crisis is a mystic state characterized by the delirium of theomaniacal possession and the division of personality” (1946, page 45). Ethnopsychiatric work in Haiti considered dissociative states, both pathological and
benign, in the vodou “crisis of possession,” and its intersection with Western religions and with medical diagnoses. Mars’ work first revealed the critical role religion and vodou played in the identification and treatment of mental illness in Haiti. Others after him investigated the role of Vodou in the Haitian healthcare system. Ari Kiev, author of “Folk Psychiatry in Haiti”, claimed the Vodou priest provided similar care to a western psychiatrist, by diagnosing “a number of syndromes suggestive of depression, the schizophrenias, hysteria, paranoia, and mental deficiency” (1946, p.33). Referring to “native psychiatrists”, Kiev used anecdotal research to assert that Vodou priests used emic approaches that contain “striking similarities between modern psychiatry and the therapeutic system” (Farmer, 1992, p.255). Unfortunately, many mentally ill patients seeking this form of treatment were stigmatized, especially as foreign entities exerted their influence on the small republic. For example, during the U.S. Occupation of Haiti (1915-1934), Americans “outlawed vodou and persecuted its practitioners, which had devastating effects on the treatment of the mentally ill, or the French trying to force ‘herbal treatments and talk therapy’, violating Haiti’s fragile sovereignty to instil their own concepts of medicine” (Farmer, 1992, p.257). Jean-Claude Duvalier’s flight from Haiti upon the downfall of the second Duvalier regime also created “the expression of an anti-vodou sentiment” because of his image as an “ally of vodou” (Farmer, 1992, p.256). Those not seeking help from vodou healers and instead trying to handle mental illness within the home, sent family members away to a small island off northern Haiti, like lepers or were confined to specific rooms within their homes, out of sight (Farmer, 1992, p.254).

Mars tried to create a more stable form of mental health care, with support
from the Duvalier government at the very start of François Duvalier’s government. Duvalier, also a physician, coordinated a collaboration with Nathan Kline (an American bio-psychiatrist) and three international pharmaceutical companies to which Kline had ties and Mars was able to open a psychiatric hospital. The hospital mainly involved short-term treatment, including pharmacological treatment, to avoid asylum-type care such as that which existed at the Beudet asylum.

**First forms of biomedical counseling**

General mental health care did not become prominent until the 1980s, when the HIV/AIDS epidemic made its way to Haiti (Nicolas et al., 2012, p.511). Although not a formal care system on its own, counseling was often encouraged as a part of the response to the outbreak. Some psychologists worked to open youth centers, like *Fondation pour la Sante Reproductrice et l'Education Familiale, Volontariat Pour le Développement d'Haiti*, and *Promoteurs d'Objectif Zéro Sida*, but these programs focused more on overall behavioral and social benefit, and not necessarily psychological treatment (Nicolas et al., 2012, p.511).

Besides the informal counseling from a biomedical perspective, there were also public and private hospitals that serve as psychiatric care centers. The Beudet facility, has 120 psychiatric beds, and the Hôpital Neurologique et Psychiatrique Mars et Kline has 20 beds (McShane, 2011, p. 8). Hospital Beudet, founded in the late 1920’s by American Soldiers occupying Haiti, was created when soldiers corralled patients into an old military barrack and employed a nurse to watch over them.

In addition, three other private psychiatric hospitals exist, totaling 100 beds in all, located in the capital Port-au-Prince. There are smaller private psychiatric
“Kliniks” (clinics) also located in the capital, four of which offer in-patient care. It is believed that only about 15 – 23 psychiatrists serve Haiti’s total population of nine million people (McShane, 2011, Nicolas et al., 2011). In 2003, the WHO counted only 10 psychiatrists and 9 psychiatric nurses dedicated to the public sector serving in the country. Haiti has one the lowest ratio of professionals to its population in the entire world (Nicolas et al., 2011).

**Traditional Healers**

Due to the lack of biomedical infrastructure, traditional healers in the form of Vodou priests are typically consulted more often on psychiatric illnesses. WHO found that religious health care options and herbalists were used by almost 80% of people seeking mental health services (WHO, 2010).

Vodou to this day remains critical to the Haitian conceptualization of mental illness, but Haitians do not exclusively seek out these services. One reason could be the history of marginalization and stigmatization of voudou. One research team in Haiti found:

Persons with mental illness, their families, and healing practitioners in the general community reported openness to seeking multiple forms of treatment. Families and even the local physician described the main obstacle to biomedical approaches as the inadequate level of psychiatric care available to treat mental illness. Nurses and doctors often told families that instead of seeking care at a clinic for symptoms of mental illness, they should continue to pray. (Khoury et al., 2012, p.528).

The research team, through qualitative interviews in Haiti’s Central Plateau, conducted between May and June 2010, found that local clinics infrequently assessed or treated mental illness. Although Haitians are willing to seek out biomedical treatment, even if they characterize their mental illness as a “spiritual problem,” the
limited training and experience of formal health care institutions lead them back to religious forms of care.

Due to the level of dissatisfaction with biomedical care, many Haitians are willing to pay more to seek treatment from a Vodou priest. Bradley Wagenaar, a researcher in the Department of Epidemiology at the University of Washington, along with his research team, found that Haitians were willing to spend up to 100 times more to seek Vodou healers' care, as seen in the chart below:

**Figure 5. Money spent per treatment for mental health care.**

<table>
<thead>
<tr>
<th>Care provider</th>
<th>N</th>
<th>%</th>
<th>Cost (Haitian goud)</th>
<th>U.S.$ equivalent</th>
<th>IQR^a</th>
<th>Cost ratio^b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital or clinic</td>
<td>376</td>
<td>92</td>
<td>50</td>
<td>1</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Herbal healer (doktè fèy)</td>
<td>104</td>
<td>26</td>
<td>250</td>
<td>6</td>
<td>80</td>
<td>5</td>
</tr>
<tr>
<td>Church pastor or priest</td>
<td>97</td>
<td>24</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>—</td>
</tr>
<tr>
<td>Vodou priest (hou'gan)</td>
<td>50</td>
<td>12</td>
<td>5,000</td>
<td>120</td>
<td>2,700</td>
<td>100</td>
</tr>
</tbody>
</table>

^a Interquartile range
^b The reference group is hospitals or clinics.

Wagenaar et al. 2013.

Haitians are very willing to seek multiple forms of treatment and mental health care, but unfortunately, the country currently lacks the infrastructure to adequately support the treatment of a population whose development occurs in the context of widespread and often chronic adversity. Its rural population suffers the most, as most forms of care exist in the countries urban centers.

**Task Shifting Structures in Haiti**
As previously stated, task-shifting interventions became a popular model when used to treat HIV/AIDS in the 1990s. Haiti’s Partners In Health (PIH) program helped institute a HIV and tuberculosis (TB) treatment program using community health workers to provide care in three rural Haitian districts (Jerome & Ivers, 2010). Those community health workers delivering care received three days of training prior to providing care, and are supervised by “health agents” who received six months of training, and further supervised by “health educators” who had higher schooling levels but only received three months of training (Jerome & Ivers, 2010). With training and supervision, the previous health care staff at each clinic shifted HIV treatment tasks to the 462 community based staff members (Ivers et al., 2010). The study revealed a large shift in tasks either to laypeople, or in a shared setting. The table below reveals how tasks were shifted in the PIH intervention among staff, in comparison to the original more traditional model:

Table 2. Percentage of tasks shared among Haitian health care practitioners vs. more traditional models.

<table>
<thead>
<tr>
<th>Cadre</th>
<th>Traditional</th>
<th>Haiti</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctor</td>
<td>0.64</td>
<td>0.03</td>
</tr>
<tr>
<td>Nurse</td>
<td>0.29</td>
<td>0.01</td>
</tr>
<tr>
<td>Non-clinician</td>
<td>0.03</td>
<td>0.04</td>
</tr>
<tr>
<td>Doctor/Nurse (shared)</td>
<td>0.01</td>
<td>0.23</td>
</tr>
<tr>
<td>Nurse/Community Health Worker (shared)</td>
<td>0.02</td>
<td>0.01</td>
</tr>
<tr>
<td>Doctor/Non Clinician (shared)</td>
<td>-</td>
<td>0.01</td>
</tr>
<tr>
<td>Doctor/Nurse/Community Health Worker (shared)</td>
<td>-</td>
<td>0.16</td>
</tr>
<tr>
<td>Doctor/Nurse/Community Health Worker/Non-Clinician (shared)</td>
<td>-</td>
<td>0.36</td>
</tr>
<tr>
<td>Doctor/Nurse/Non-clinician (shared)</td>
<td>-</td>
<td>0.12</td>
</tr>
<tr>
<td>Nurse/Community Health Worker/Non-Clinician (shared)</td>
<td>-</td>
<td>0.01</td>
</tr>
<tr>
<td>Nurse/Non-Clinician (shared)</td>
<td>-</td>
<td>0.01</td>
</tr>
</tbody>
</table>

Ivers et al. 2010.

As you can see in the table above, tasks that were normally directed all to doctors and nurses, were now being shared among all workers involved in the project. Specifically, doctors who had originally provided 64% of care in more traditional models, were now only providing 2% overall, where as doctors, nurses,
community health workers, and non-clinicians now shared 36% of the work. Overall, community health workers accounted for almost half of the work performed in the care setting. Although the previous structures were in place for task-shifting interventions, Haiti lacked a concentrate of mental health in many forms of its institutional infrastructure. The minister of health admitted “the mental health needs of the population had been neglected…and that the disaster had exposed a public sector mental health system in disrepair” (Raviola et al., 2012). Mostly due to a changing political climate, the country lacked not only a focus on mental health, but lacked the infrastructure to properly support mental health needs after the earthquake.

Nepal

Biomedical Infrastructure

As previously stated, Nepal had a stronger, more consistent infrastructure for mental health care than the country of Haiti. In 1961, Nepal’s first psychiatrist created a 4-bed inpatient unit at Bir Hospital, which provided general health services (Sharma, 2013). It has separated to become its own psychiatric institution with 50 inpatient beds. When Tribhuvan University created the Institute of Medicine (IOM), and a teaching hospital within the University in 1983, it only took them three years to open a Psychiatric Out Patient Service (Aich, 2010). By 1987 they had 12 in-patient beds, and within a decade offered clinical psychological services to the Nepali people. The IOM was the first educational institution to create a postgraduate training program in psychiatry, encouraging Nepali doctors to train and continue to practice inside the country, rather than leaving for other opportunities. In 1999 a psychiatric
nursing program was also created by the IOM to train more mental health care professionals. After the IOM created its training program, the Manipal College of Medical Sciences, Pokhara, the Universal College of Medical Sciences, Bhairahawa, and the National Medical College, Birganj all developed psychiatric degree programs.

In 1996, Nepal created a National Mental Health Policy, with the goals of “ensuring accessibility of minimum mental health services for all the population of Nepal by the year 2000” (Upadhaya, 2013, p.2). The policy also called for training of necessary human resources, guaranteed human rights to the mentally ill, and raised awareness surrounding mental health (Ministry of Health, 1996). The government created 4 strategies in order to successfully target and meet each goal outlined in the written policy. The policy also outlined implementation strategies at the central government level, the regional level, and the district level. The National Mental Health Policy was created and meant to be implemented into primary health care, but unfortunately as of 2015, the policy was still not fully operational (Nepal Desk Review, 2015).

Currently there are 18 outpatient mental health facilities in the country, 3 day facilities, 17 community based psychiatric inpatient units, and 1 mental hospital available in the country (See Figure X Below).

Figure 6. Patients Treated in Mental Health Facilities (rater per 100,000 population). (WHO, 2006).
The outpatient facilities alone treat 297.9 users per 100,000 in the Nepali population (WHO, 2006). Now there are 54 psychiatrists in the country, a child psychiatrist, and 28 mental health nurses, and each year have been increasing in number (Upadhaya, 2013). For comparison to other lower-income countries, the map below illustrates the average number of mental health professionals per each 100,000 people in each country, where both Nepal and Haiti are in the 0-1 category.

Figure 7. Number of mental health professionals per 100,000 people in each country income group.
For primary care doctors, only 2% of training for medical doctors in Nepal is dedicated to mental health (WHO, 2006). Although there is limited training for health professionals, somewhere between 21-50% of primary care clinics throughout the country have access to assessment and treatment protocols for mental health (WHO, 2006). There is no coordinating body that oversees mental health treatment and access between different stakeholders, but NGOs and international organizations, especially as of late, have played a critical role in creating public health interventions to increase access to mental health care.

In addition, many international organizations and NGOs contribute to mental health systems in Nepal. TPO works with multiple international donors, agencies, and consortia to provide mental health resources to 23 of the 75 districts in Nepal. TPO alone has over 350 psychiatrists, psychologists, psychosocial counselors, community based workers, and an administration and support staff.
TPO had been responsible for interventions like, workshops providing a two-day training to increase mental health literacy in emergency settings for workers, and psychosocial interventions to improve mental health for child soldiers in the country (Jordans et al, 2012, Kohrt et al., 2010). The TPO’s work in the non-profit sector provided a strong mental health system for the post-earthquake setting.

**Traditional Healers**

Although the infrastructure for biomedical forms mental health care exists in Nepal, not all are accessible to the Nepali people, and many turn to traditional healers to treat their symptoms. Nepali people see invisible forces such as ghosts, bad spirits, dead ancestors, sorcerers, witches and enemies as responsible for their mental illness, which is why it is believed only a traditional healer can help those patients (Upadhayaya & Pol, 1999). About 800,000 traditional healers serve in Nepal, and almost all mentally ill patients will see a traditional healer at least once in their lifetime (Shrestha et al., 1999). Treatments from traditional healers range depending on a specific ailment, but Dr. Upadhaya and Mr. Pol spoke at the National Seminar on Implementation of National Mental Health Policy in 1999 about traditional healers and faith healing claimed:

Faith healers help many patients with emotional disorder, dissociate disorder, relational problems and some of the self-limiting physical illnesses by their traditional method of healing. These traditional healing methods are comparable to the modern psychological methods of treatment such as counseling or psychotherapy. Blowing mantras, giving empowered water to drink, and religious ceremony all seem to employ the placebo effect in order to cure patients. Scientific studies have shown that prayer and religious ceremonies also reduce the impact of stress hormones such as adrenaline and noradrenaline. Traditional healing methods, which are shared and culturally accepted, help to relieve tension in the patients, his or her family members and the relatives and arouse faith and hope in them all. (p.154)
Their comments reinforce support of the traditional healers in the country, but evidence illustrates healers only relieve minor forms of mental health stress. Those healers that attempted to help patients with more serious cases like schizophrenia, or seizures often died or delayed other biomedical life saving treatment. Because Nepali concepts of mental health imagine the concept of disease originated outside the patient, many times extreme tactics like beatings or pouring boiling water is used to expel the disease (Acland, 1999). Many leaders in the Nepali mental health community at the National Seminar on Implementation of National Mental Health Policy believed traditional healing methods needed to be limited due to “some of the practices of traditional healers (are) physically dangerous to the patients and should be discouraged and stopped” (199, p.184).

**Previous Task-Shifting Infrastructure**

As the mental health system in Nepal has developed, task-shifting models are emerging as an important strategy to provide mental health care. The first mental health task shifting intervention in the country was founded in 1984, by the United Mission to Nepal or UMN (a multinational Christian agency). The organization implemented a community health delivery system in collaboration with the Ministry of Health, and Tribhuvan University in the country. Two psychiatrists, Dr. Marjorie Foyle and Christine Wright, created a community mental health program in Llitpur, Nepal (Acland, 1999). The UMN had already established five rural and two urban health outposts in the poor district, dedicated to serving the community by providing care through community health workers. The goal of the new initiative was to incorporate mental health into the previously existing program.
The intervention meant the community health workers would be trained in diagnosis, and treatment of mental disorders. The community health workers received nine days of training in groups of 12, where they were taught the five main diagnosis that present at the health outposts (psychosis, epilepsy, depression, anxiety, and hysteria). Little of the training focused on differentiating between diagnoses, where as most was on finding a broad diagnosis category and how to treat it. Most counseling training tactics focused on “listening”, coupled with prescription of: chlorpromazine, depot fluphenazine, trihexiphenidyl, phenobarbitone, and amitriptyline. All community health workers are given materials at the training to help assist with their diagnosis and treatment in the community.

After 5 years, Dr. Wright, in collaboration with the Institute of Medicine in Nepal, expanded the initiative by creating the Community Mental Health Project (CMHP), which worked with previously established public health posts in the Kaski, Banke, Syangja, and Morang district to incorporate mental health programs. Starting with only two psychiatrists and one administrative officer, the CMHP had limited human resources to implement the program, but as of 1999, the program had expanded its personnel to include a larger working staff of both foreign and local professionals.

In 1993 the program was evaluated for its success. In the outpost in Morang, 421 patients were active, but the number of patients who had received treatment in the last four years numbered: psychosis 557, depression 1124, epilepsy 4878, mental retardation 34, and neurosis 144. Knowing the population was about 300,000 in the community at the time, and assuming prevalence rates of the disease were average,
the number of patients treated was much lower than those who are most likely suffering from mental illness. Numbers project that mental retardation should be about 4% of the population; meaning about 12,000 patients should be effected by the disorder. The only disorder where patient numbers are close to what is expected is epilepsy, where about 2-3% (or 6,000-9,000 patients) should be treated. Although a treatment gap still exists, the CMHP program created opportunities for Nepalese people to seek help (Acland, 1999).

Another task-shifting intervention, the PRIME program is an intervention sponsored by the UK Department for International Development in collaboration with Ministries of Health, in 2010 (Lund et al., 2012). The goal of the program is to provide community based care and capacity building for mental health in five low-income countries (Lund et al., 2012). In Nepal, PRIME was able to analyze gaps in mental health treatment in order to develop a local health care plan in the Chitwan district (Luitel et al., 2015, Lund et al., 2013). The program involved an apprenticeship model, where mental health specialists trained and supervised non-specialist community health workers, who would in turn identify distressed patients and refer them to primary care centers for treatment (Mendenhall et al., 2014). In order to identify local concepts applicable to the diagnosis of mental illness, they conducted in depth interviews with key informants, and focus group discussions in the community before the lay individuals were trained (Brenman et al., 2014).

Community members and volunteers felt that PRIME was a successful and feasible method to reach patients in need of mental health services. Emily Mendenhall, at the time of the program was associated with the Center for Global
Mental Health at the London School of Hygiene and Tropical Medicine, along with her colleagues evaluated qualitative assessments of the PRIME program:

Increasing access to mental health services was reported as an important benefit of task-sharing across all sites, and something that was urgently needed...Most sites also reported that saving time and money and reducing disparities were benefits of task-sharing mental health services. At least two sites reported that decreasing stigma, preventing progression of mental illness, and improving medication adherence were also important benefits. (2014, p.36).

Previous mental health task-shifting interventions helped established a foundation for immediate mental health recovery programs after the earthquake.

**Chapter 3: Task-Shifting Interventions in the Post-Earthquake Context**

**Haiti**

In the five plus years since the Haitian earthquake of January 12, 2010 struck, three mental health interventions have been implemented to relieve traumatic distress and other mental health problems. Due to the lack of resources, and lack of previous mental health infrastructure, task-shifting was employed in order to disseminate care.

In April 2010, 3 months after the earthquake, Leah Emily James, a doctoral student at the University of Michigan and her colleagues, in collaboration with Haitian and Western professionals, developed a task-sharing intervention to treat people in an internally displaced (IDP) camp in Port-au-Prince. The intervention, called Soulaje Lespri Moun, meaning “relief for the spirit” in Creole (SLM), adapts western psychological treatment methods to the Haitian context.
The SLM method used an apprenticeship model, where a team of U.S. and Haitian qualified professionals trained local people, who in turn trained IDP camp members to work as peer leaders to provide ongoing support. The use of lay people helped empower IDP camp members, and incorporated culturally sound knowledge to encourage best practices for participants. One of the main goals for SLM is to maintain Haitian cultural beliefs while still providing relief based on western validated methods. James and her colleagues claim:

A central tenet of SLM’s approach is that people are able to maintain multiple belief systems and shift between explanatory models as needed. They may also utilize varying treatment sources even when these offer conflicting “diagnoses.” More specifically, we propose that Haitian SLM participants can appreciate psychological as well as Christian, Voodoo, and other local explanations and treatment recommendations simultaneously, without one wiping out or disrupting the others. (2012, p.116).

The development of a culturally competent program was critical for providing support after the earthquake, in order to not infringe on the resilient nature of Haitian identity, and limit the foreign involvement in the program. In order to keep foreign doctor involvement to a minimum, the U.S. professionals trained eight local lay workers in collaboration with the local Aristide Foundation for Democracy. The workers were all survivors and involved with the local organization, which empowers and educates youth in Haiti. The lay workers were trained over a one-week period, where they were introduced to their curriculum for “coping” which they would be using to treat IDP camp residents. The curriculum was a combination of both western and Haitian methods, occasionally merging the techniques to provide relief to participants.

The intervention targeted seven separate IDP camps over a period from April
2010 until January 2012. The lay workers conducted seminars with hundreds of people over the intervention. Seminars were chosen as the method of delivery of treatment because education or training is seen to have social value by the Haitian community (James, 2012, dissertation). The exact topic of each seminar varied depending on the needs of the camp or changing attitudes as time went on. The lay workers implementing these seminars were still monitored by foreign mental health professionals and those who had trained them. At the camps, the lay-workers trained some survivors to be peer counselors, to continue to provide support in between workshops.

The researchers evaluated the success of the intervention by conducting before and after assessments of trauma related symptoms in each participant. The Harvard Trauma Questionnaire (HTQ) was used to understand the difference in trauma symptoms, which they found a significant decrease (less than a .001 probability level) following participation in the SLM program (James, 2012). The table below shows the results for the average HTQ score in two different groups monitored at IDP camps.

Figure 8. The mean score for the HTQ for participants in two separate groups monitored in IDP camps.
While titled “successful” interventions, only 149 people in camps were surveyed for their pre and post-trauma levels, although 100,000 people were displaced to these camps. The organization was able to help some, but the lack of mental health infrastructure meant only task-shifting, cost effective, use of non-specialists could work as a successful intervention under the conditions.

Partners in Health (PIH), along with its Haitian counterpart Zanmi Lasante (ZL), also implemented a 5 by 5 task-shifting care program in four IDP camps in the Port-au-Prince area, and in the previous clinics PIH established that served 1.2 million Haitian residents (Raviola et al., 2012). The employees dedicated to the mental health intervention, named “The Team,” were able to expand resources of ZL...
by staffing 17 psychologists (from the original 3), and 50 social workers and social work assistants (to add to the original 20) (Raviola et al., 2012). Along with the trained supervisory team, mental health focused community health workers were also sent out to provide treatment. Each camp had a team of 8 psychologists, 6 social workers, and 13 mental health community health workers, where as ZL previously established hospitals in the central plateau region were assigned one psychologist who would create a multidisciplinary team to handle mental health care at each site (Raviola et al., 2012).

The 5 by 5 method, as mentioned previously, is five implementation rules, combined with five skill sets to help create the intervention. Although there is not quantitative data to illustrate the success of the 5 by 5 intervention, ZL was able to mobilize an intervention within four months of the earthquake. In addition, the team at PIH worked to build “capacity for overall psychosocial and mental health services”, in addition to collaborating with the Haitian Ministry of Health to develop a national mental health plan (Raviola et al., p.70, 2012).

Lastly, the University of Miami created a collaboration between its School of Nursing and Health, School of Education and Human Development, and the Miller School of Medicine, along with its local partners the Ministry of Health and L’hôpital Justinien to create a Mental Health Training Program (MHTP). Developed by Guerda Nicolas (a Haitian psychologist), MHTP was designed to train and educate Haitian healthcare providers already working in the healthcare system, on mental health triage and treatment (Cianelli et al., 2013). The program was not implemented in Port-a-Prince like the previous programs, but rather Cap-Haitien, the northern area of
Haiti. Although Cap-Haïtien was not directly affected by the earthquake, the area became home to many earthquake survivors and people were forced to evacuate from Port-au-Prince.

The MHTP comprised of a 40 hours of training conducted over five sessions from April to September 2011, in small groups of 25-30 healthcare workers, totaling in 113 nurses, physicians, and social workers (Cianelli et al., 2013). After the training, health care workers expressed their increased specialty at identifying mental health issues, commenting on how they “now offer a quality service that combines medicine with moral and psychological support” (Cianelli et al., 2013 p. 531.). Although not licensed in an official capacity, health care staff now has the ability to provide adequate mental health care to those suffering after the quake. These programs have been able to provide much needed mental health care, but the lack of previous infrastructure for mental health treatment provided a myriad of challenges for effective, rapid scaling up of mental health services.

Nepal

Immediately after the 2015 earthquakes in Nepal, TPO assessed the mental health needs and resources accessible to address mental health issues (TPO, 2015). Through 45 key informant interviews, 15 focus groups, and 513 surveys, TPO used tools like the Hopkins Symptom Checklist for Anxiety and Depression, the HESPER Scale to identify current needs, and the PTSD symptom checklist to assess trauma in districts hit hardest. In preliminary data collection, the TPO found startling prevalence’s of psychological distress:
Further qualitative assessments revealed people were unable to sleep, felt hopelessness, and were unable to perform daily tasks. TPO’s quick assessment response helped further inform necessary tactics for their intervention. TPO stated: “previous work experiences in the emergency was very helpful to conduct needs assessment in the post earthquake setting” (2015).

Immediately after the earthquake struck, TPO lead the mental health programs for all districts that were affected by the earthquake, the immediate response being the creation of a mobile health camp, psychological first aid, and a physical recreation program at a temporary learning center. TPO then worked alongside other international groups to develop more long-term programs.

In 2015, the WHO developed the mental health Global Action Programme Humanitarian Intervention Guide (mhGAP-HIG) to help lay individuals provide treatment after crisis (Richards, 2015). The WHO, the Government of Nepal ministry
of Health and Population, Duke Global Health Institute, and TPO collaborated to train 14 psychiatrists in the country, who would in turn train 120 primary care doctors, using the mhGAP-HIG guide. The 14 psychiatrists were all from Nepal; 11 from Kathmandu, one from Chitwan, one from Pokhara, and one from Dharan (Richards, 2015). They participated in the “Training of Trainers and Supervisors”, which used an adapted mhGAP-HIP guide specific to Nepal. The training lasted four days from July 5-8, 2015, and all participants received copies of the adapted mhGAP-HIP guidelines (Richards, 2015). After the training, the psychiatrists trained the non-specialist healthcare providers in a nine-day training session. The training of laypersons was an in-depth workshop introducing the basic concept behind the task shifting program, and introduction and screening assessment into depression, suicide, schizophrenia, epilepsy, PTSD, alcohol use disorder, and anxiety problems (Richards, 2015). The laypersons are able to provide ongoing mental health care, are supervised by the 14 psychiatrists, who are in turn supervised by the master facilitators of the program.

Multiple task-shifting programs were also in place before the latest earthquake struck Nepal, that the TPO used added components to create an emergency mental health intervention. The Female Community Health Volunteers (FCHV) program was instituted in 1988 by the Nepali ministry of Health and Population to deliver maternal and child care (Schwarz et al., 2013, Luitel et al., 2015). With over 48,000 volunteers working locally in their communities, women volunteer for about 5 hours a week in addition to 18 days spent training in health care delivery to provide adequate care (Glenton et al., 2010). The FCHV program has been lauded for providing women with access to early pregnancy detection,
counseling, and safe abortion or planning services (Andersen et al., 2013). For example, in a study conducted in 6 Nepali districts, researchers found the FCHVs were able to deliver 4,598 urine pregnancy tests (UPT), to assist with early pregnancy detection (Andersen et al., 2013). The table below illustrates the results from the study.

Table 3. Mean number of UPTs performed per FCHV in each district.

<table>
<thead>
<tr>
<th>District</th>
<th>No. of FCHVs</th>
<th>Mean No. of UPTs per FCHV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jhapa</td>
<td>184</td>
<td>5.0</td>
</tr>
<tr>
<td>Chitwan</td>
<td>247</td>
<td>3.9</td>
</tr>
<tr>
<td>Dhading</td>
<td>107</td>
<td>2.6</td>
</tr>
<tr>
<td>Kailali</td>
<td>533</td>
<td>2.6</td>
</tr>
<tr>
<td>Surkhet</td>
<td>341</td>
<td>2.5</td>
</tr>
<tr>
<td>Tanahu</td>
<td>80</td>
<td>2.1</td>
</tr>
<tr>
<td>All Districts</td>
<td>1492</td>
<td>3.1</td>
</tr>
</tbody>
</table>

As demonstrated above, Haiti did not experience the same scaling-up of mental health resources immediately after the earthquake as later occurred in Nepal. What exactly shapes this narrative though? Haiti had a rich history and an innovative
system of ethnopsychiatry that was soon forgotten. Ethnopsychiatry's connection to the passing political structure made the mental health infrastructure obsolete, and erased it from cultural memory. This raises questions concerning how decisions are made concerning improvements in health care in low resource settings. And the answer generally is, unlike in Haiti, where Louis Mars had completed a local version of the Western medical curriculum and then turned his sights on his own culture: the international community. This can be a great asset. Nepal had previous experts, NGOs, and government support dedicated to mental health care treatment, allowing for quicker trauma burden assessment, resource evaluation, and implementation of programs. Most of those interventions were established by outside forces, as Western groups can fund and supply interventions. Nepal had international investment into its mental health infrastructure, and enough time to establish a stronger mental health care system than Haiti. After the 2010 earthquake, Haiti began to see the same type of foreign investment into its mental health care system. But it needs to be a transitional asset: both Haiti and Nepal will need to generate their own training and credentialing systems.

**Chapter 4: Challenges of Implementation**

Task-shifting in low resources settings is not without its own challenges. Dr. Fils-Aime, the doctor who directed the PIH task-shifting team in Haiti, spoke about the problems they faced with their program:

As with most innovations, there is resistance to it. The biggest challenges are lack of structures and systems to treat mental illnesses, a lack of trained human resources, the need for political commitment and financial means, and the social perceptions of mental illness, including stigma (2014).
These are just a brief overview of a few of the problems plaguing low-income countries.

The first challenge many groups face is determining and convincing the mental health interventionists that mental health care must be a priority. More formal mental health care has relatively recently been deemed necessary in many developing areas of the world, especially as new evidence shows that traumatization of these populations is more pervasive than originally thought. As Emily James explores the idea of “trauma portfolios”, the international community sees trauma in low-income countries as a norm, and not necessarily a problem that needs addressing. In 1994 during the terrors of the military coup in Haiti, where paramilitary groups raped and plundered to reinforce their power, the United States Embassy in Port-au-Prince sent a cable to its home country saying, “We are, frankly, suspicious of the sudden high number of reported rapes, particularly in this culture” (2004, p.133). The statement implied that “Haitian sexuality was naturally violent and depraved,” and that Haiti’s citizens could not possibly be facing trauma or war crimes because it was a norm for the country (James, 2004, p.133). This blatant disregard for the mental health and safety of the Haitian people confirms the difficulties of justifying mental health care in developing countries to the outside world in the face of conflict or disasters.

In the immediate aftermath of natural disasters, survivors may not be able to process the traumatic events, and do not show symptoms for some time, leading many stakeholders to deny the necessity of mental health care. The International Organization for Migration found that in Haiti, six weeks after the earthquake, only 50
patients needed specialized psychiatric services, using the data as a strong indicator of overall mental distress (Schinina et al., 2010). Yet there is no description of methodology of diagnosis, or number of patients assessed, making the statistic relatively useless. Alternatively, there are other studies illustrating a dramatic need for treatment services, especially in post-earthquake disaster zones. Warsini and his colleagues reviewed PTSD trauma of earthquake survivors, citing multiple studies that found more than 30% of the survivors demonstrated PTSD symptoms after earthquakes (2014). They found even higher rates of depression, reaching more than 50% in some locations (Warsini, 2014). The need for mental health treatment is clear, even if underplayed in the international aid community.

After overcoming the first obstacle of determining need for treatment, prioritization of needs is the next biggest barrier. As aid rushed into these countries, resources are dedicated to immediate necessities like food, water, shelter, and triage, not on mental health emergency relief. Coordinating aid has been a challenging and daunting task for relief organizations, but is often forgotten or ignored as nonprofit groups, governments, and multinational development organizations establish their own goals and practices (IASC, 2007). With priorities on other issues, aid organizations do not have the funds for mental health programs.

Costs of mental health programs have become a difficulty to care for low-income nations. Dr Benjamin Reese, the Vice President of the Office for Institutional Equity at Duke University, was unable to implement a task-shifting intervention in the aftermath of the earthquake due to cost concerns. In 2010, Family Health Ministries invited him and his wife, a non-profit dedicated to build healthy families in Haiti, to
visit the groups clinic in order to provide stress reduction workshops for women in the community. Although the original intention was to train the women as lay healthcare providers, Dr. Reese could not find funding to sustain trips to the country in order to properly train the volunteers as workers for the program. He was able to make nine trips to provide workshops for participants ranging from 10-100 people, but every trip he paid for with his own savings. Funding for mental health did not exist after the earthquake, nor could he find non-profits or other agencies that were interested in assisting his program. Dr. Reese’s problem was common in the aftermath of the Haitian earthquake because even though aid flooded into the country, each NGO and donor had his or her own priorities, which most often was not mental health.

Limited funding is dedicated to global mental health, but also, aid organization funding is spent erratically. Logistics of aid organizations are complicated and difficult to manage, and in a disaster zone, funds can get diverted or donated to the wrong places. After the 2010 earthquake in Haiti, the Red Cross received almost half a billion dollars in aid, and yet couldn’t use the money they received adequately in time to provide support to survivors (Benjamin et al., 2011). Jonathan Katz, an investigative reporter in Haiti at the time of the earthquake, found that less than 10% of humanitarian aid funding was given to the Haitian government (2013). For example, most of the funds donated after the earthquake went to the Red Cross foundation, who spoke out about the excessive amount of donations, and the lack of the organization’s capacity to use it all in a timely manner (Katz, 2013). Because people donated aid funding through specific organizations or groups, funding cannot
be properly organized, and funneled through proper channels (Easterly, 2002). In addition, countries include debt forgiveness in the “donated dollars”, so no new cash or aid actually flows into the country, but outside nations include these numbers as apart of aid (Katz, 2013). The lack of transparency around aid donations was heavily criticized after the Haitian earthquake, changing the policies surrounding donation practices. Costs quickly become a large concern because without a steady funding supply, programs cannot be implemented or sustained.

**Sustainable Capacity Building**

Sustainability is a concern for task-sharing that engulfs many secondary issues. While there are guidelines detailing minimum response for psychosocial support in emergency settings, there is no support data for long-term capacity building in these settings. As disaster zones turn into long term recover zones, there are multiple factors that influence the sustainability of task-shifting programs.

First, post-disaster zones are hotbeds for volunteer work and aid organizations. Non-profit organizations flock to these zones to provide immediate relief to the survivors of accidents. Volunteers typically have a high turnover rate due to the traumatic nature of the work they do. Research shows almost 80% of aid workers will face some psychological stress, although it will not likely effect their functioning (Robbins, 1999). The stress, and difficulties of the work results in a short “shelf life” for aid workers. Due to the short duration of trips for workers in these disaster zones, programs cannot keep a steady enough workforce to continuously staff programs.
In addition to lack of volunteers, programs have difficulties with implementation due to the lack of collaboration between international and local organizations. In a post disaster setting, it is critical to have one mental health strategy plan executed by all parties involved in the space. The Inter-Agency Standing Committee (IASC) Guidelines on Mental Health and Psychosocial Support in Emergency Settings state:

In emergencies, coordination of aid is one of the most important and most challenging tasks. This document ... calls for a single, overarching coordination group on mental health and psychosocial support to be set up when an emergency response is first mobilized. The rationale for this is that mental health supports and psychosocial supports inside and outside the health sector are mutually enhancing and complementary (even though in the past they have often been organized separately by actors in the health and protection sectors respectively.... If no coordination group exists or if there are separate mental health coordination and psychosocial coordination groups, the guidelines can be used to advocate for the establishment of one overarching group to coordinate (mental health) responses. (2007, p.8).

Coordination is critical to implement successful programs and treatment strategies, but many international groups struggle to coordinate with local groups. Medical relief groups have their own goals and mission statements, and are motivated to manage their “own” supplies, staff, and patients, leading to inefficiencies among service providers (Benjamin et al., 2011). Different organizations are trying to please their own donors and respect their own missions, but this often leads to wasteful or dual programs and services. Because of the strain on resources, and lack of coordination with local organizations, programs cannot sustain themselves and are typically more short-term projects.

Oftentimes, aid volunteers, and health workers in low-income countries are already overworked or working at capacity. There is justified concern that asking
community health workers to take on more specialized tasks will result in “task-dumping”. Catrin Evans, an experienced nurse working on a task-shifting intervention in South Africa, expressed her distress when interventions prioritized cutting costs, resulting in overworked volunteers who were concerned about the integrity of their clinical care (2009). There are conflicting qualitative personal accounts on “task-dumping”, as many other studies cite the positive or willingness to take on mental health task-shifting duties.

Re-Traumatizing Lay Workers

Lastly, it is important to consider that task-shifting mental health care to lay persons may cause more harm, rather than help. In trauma stricken areas like a post-disaster setting, there is concern that exposing counselors to more trauma would in turn cause further damage to them during the course of the intervention. While this is a concern, there is no strong or conclusive evidence proving the theory true or false.

When implementing task-shifting strategies immediately after a natural disaster, the local volunteers who treat other community members are also trying to cope with their own experiences. Psychiatrists have acknowledged how stressful these task-shifting roles can be, especially in an intense setting for an untrained worker (James, 2012). When evaluating humanitarian aid organization employees in disaster settings, one study found 30% of workers showed significant symptoms of PTSD (Eriksson, 2001). Yet, another contradicting study shows only 2-7% of aid workers are likely to experience acute adverse psychological affects due to the work (Robbins, 1999).
Multiple research studies have investigated the experiences of lay mental health workers and their own mental health state. Leah Emily James, a prominent behavioral science researcher, implemented a mental health task-shifting intervention in Haiti immediately following the earthquake in 2010 that was discussed in depth in the previous chapter (2012.) After the project was implemented, she returned to study the effects of helping survivors on the laypersons who were in fact survivors themselves (2014). Her team measured Post-traumatic stress disorder (PTSD) using the Harvard Trauma Questionnaire (HTQ) among the volunteers who implemented care before their training, after, and every few months periodically. James and her colleagues found that PTSD decreased over time, and dropped by a marginally significant amount one week after they completed their training (2014). The figure below illustrates the results.

Figure 10. Post-traumatic distress of lay mental health workers over time. Based on the Harvard Trauma Questionnaire (HTQ).
Other task shifting studies have shown similar responses, where community health workers articulated the comfort they receive from providing emotional support (McLean et al., 2015). In Nepal, primary health care workers felt a strong positive response for willingness to engage in task-shifting programs (Luitel et al., 2015). The above evidence illustrates that instead of traumatize, these programs provide relief for community health workers. Alternatively, studies have shown that workers who originate from outside of the country to provide aid support, who are not given training in a mental health capacity, do feel distressed (Eriksson et al., 2012). A possible reason could be that the training involved in task-shifting interventions provides a form of care for community health workers that international aid workers do not receive.

**Conclusion**

Through extensive research and understanding of post-disaster emergency mental health care, the task-shifting model clearly emerged as a successful strategy to deliver treatment to those desperately in need. Task-shifting has become an important approach due to its ability to utilize vast amounts of workers, its inexpensive model, and its cultural relevancy. It is these factors, along with others, that have encouraged the WHO to widely publish its support of the model, and for many organizations around the world to use the paradigm in intervention programs.

Yet, we still must consider how the archetype “task-shifting” has created the bureaucratic and abstract idea of a “layperson”, creating a problematic label that implies a lack of aptitude in tasks performed. The term does not adequately represent
the personalized skills and expertise that are brought to improve the programs with the addition of local community workers. Why exactly does this happen?

Is it due to the way we determine not only “who” is important in mental health care, but also “what”? The international community plays a critical role in creating, influencing, and documenting histories and standards of mental health care, as many of these low-income countries depend on outside forces to improve their health care infrastructure. For example, one of the biggest influences on mental health in Haiti post-earthquake was the Partners in Health SLM program. Their previous presence in Haiti helped establish which health issues were “important”, and which could wait. Unfortunately, that focus was not on mental health until after the disaster. Comparatively, Nepal had multiple international organizations implement strategies or non-profit intervention, mostly due to its previous civil war. In the wake of conflict, the country experienced a drastic increase of attention to mental health issues. International organizations, working with local health care institutions, determined that mental health was important to the healing of the Nepali people, therefore Nepal received proper resources for mental health care, and was more prepared for its post-earthquake recovery.

Unfortunately, as long as low-income country's healthcare infrastructure is dependent on the international community, mental health services will not be able to provide sustainable, long-term care. Instead, a new task-shifting model must emerge. In place of relying on international organizations and western concepts of medicine, local programs must rely on previous local programs in the country, like teachers or social workers, to implement mental health interventions. The previous training and
local involvement of these workers make them more prepared to deliver health care, while also giving the power of the health care system to the local community. Although there are few mental health professionals in low-income countries, Universities are creating professional degrees, and encouraging professionals to work in country. Alternatively, task-shifting can be replaced if these universities, or larger institutions, could provide more formal training to turn “lay people” into more defined professionals. One fact is true, low-income countries need to look to build their own mental health infrastructure in the form of training, and disaster preparedness.
EndNotes


