Title: Political violence, natural disasters and mental health outcomes: developing innovative health policies and interventions

Subtitle: Trauma and Global Health

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Report Type: Final Technical Report

Date: June 30, 2012

IDRC Project Number: 103460-039

IDRC Project Title: GHRI TC Political violence, natural disasters and mental health outcomes: developing innovative health policies and interventions

Country/Region: Guatemala, Nepal, Peru and Sri Lanka

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Abstract

The Trauma and Global Health (TGH) Program stems from a partnership between the Douglas Mental Health University Institute - McGill University and research teams based in Guatemala City (Guatemala), Khatmandu (Nepal), Lima (Peru), and Colombo (Sri Lanka). The 5-year TGH program enables the Douglas Institute-McGill University Team and TGH Country Teams to conduct a collaborative research and action program of advanced studies, continuing education, capacity building and knowledge transfer in the social and cultural dimensions of mental health. Its ultimate objectives are: 1) to reduce the mental health burden of civilian populations exposed to protracted and endemic political violence and/or episodic natural disasters; 2) to foster the process of healing, psychosocial rehabilitation and recovery; and 3) to generate improved mental health policies and services in the participating countries. Although psychological trauma has been a central concern for medical practitioners working with veterans and refugees, less attention has been paid to the mental health of civilian populations which have been confronted with extreme adversities and organized violence, such as armed conflict, wars and political upheaval, including episodic natural disasters. Government programs, humanitarian organizations and international agencies engaged in relief operations and post conflict stabilization, have adopted models of clinical and psychosocial intervention developed in western settings that are assumed to be widely applicable, but remain of limited social and cultural relevance and uncertain therapeutic efficacy. It is within this framework, the TGH research program has contributed to rethinking humanitarian responses and strategies for healing and coping by moving beyond the narrow psychological focus to a wider perspective of the social and cultural context in which people live, cope with and recover from potentially traumatic experiences. In doing so, the TGH research program has contributed to reassess humanitarian responses and strategies for prevention, as well as healing and coping with trauma, and has established sustainable research environments in the participating countries.

Keywords: political violence, armed conflict, war, mental health, psychological trauma, humanitarian interventions

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1. THE CONTEXT: SITUATIONAL ANALYSIS AT THE POINT OF DEPARTURE

The consequences of organized and intentional violence for civilian populations are more complex that initially thought. In the strict sense, the impact of a war cannot be solely examined by the sheer number of casualties, the numbers of refugees and forcibly displaced populations, or the material losses and breakdown of social services resulting from it. There are significant effects expressed in the lingering, additional burden of disease, disability, and death and other less evident but more pervasive ecological, social and economic consequences, such as family disintegration and attrition of social networks, environmental degradation, dislocation of food production systems, disruption of the local economies and exodus of the work force, all of which have profound implications in the health and well-being of survivors (Pedersen, Tremblay, Errazuriz & Gamarra, 2008).

In the following sections, we will address the context within which the Trauma & Global Health (TGH) program evolved and sketch a situational analysis at the point of departure by providing an overview of the global impact of war and violence with a specific focus on gender, health and mental health outcomes, as well as review the main therapies being used and intervention strategies, including humanitarian initiatives, for helping civilian populations during and after armed conflict and episodic natural disasters.

The global impact of war and violence

Our most serious contemporary problems –including mental health– are an intricate part of globalization and the global crisis: global warming, resource depletion, ecosystem degradation, poverty and social inequalities, violence, conflict and war, are the fundamental elements inherent in the basic cultural patterns of our now global-scale civilization.

Violence in particular has become one of the leading causes of death worldwide for people aged 15-44 years (Krug, Dahlberg, Mercy, Zwi & Lozano, 2002). Of the total number of global injury-related deaths, about 2/3 are of “non-intentional” origin (e.g., traffic accidents) while 1/3 are due to intentional violence, including suicides, homicides, and organised violence

(i.e., terrorism, wars and armed conflict, genocide and ethnic cleansing) (Murray, King, Lopez, Tomijima, and Krug, 2002).

Both the frequency and the numbers of people killed by intentional violence and natural disasters have increased markedly over the last half century, while the proportion of survivors has also risen significantly (Pedersen & Kienzler, in print; Center for Research on the Epidemiology of Disasters, 2009). This means that compared to the previous years, today there are many more survivors who may be exposed to and affected psychologically by traumatic events resulting in poor mental health outcomes (Desjarlais, et al., 1995).

If we limit this review to the last two centuries only, wars with a long lasting – so called 'transformational'– effect on the course of world history, leading to important changes in the global order, represent an estimated total of 42 years of conflicts, with a conservative estimate of about 95 million deaths, including both combatants and civilians (Smil, 2008). Another estimate shows that since the end of World War II, a total of 240 armed conflicts have been active in 151 locations throughout the world (Harbom &Wallensteen, 2009). While the number of *interstate* wars have been declining since the early 1990s, the number of *intrastate* wars, most often fought between ethnic groups or loosely connected networks most often challenging poor and underdeveloped states or even powerful nation-states, have increased both in frequency and in levels of organised violence, inflicted atrocities and psychological warfare. According to Holsti (1996), the classical and persistent Clausewitzian conception of war "as the continuation of politics by other means" which was predominant in Europe for almost three centuries (1648-1945), bears little relevance to the analysis of today's contemporary wars. The emergence of the so-called low-intensity wars[1] or "wars of the third kind" (Rice 1988) —which are at once "a war of resistance and a campaign to politicize the masses whose loyalty and enthusiasm must sustain a post-war regime" (Holsti 1996) — are the prevailing forms of armed conflict today. In these contemporary wars, the target is not the territory but the local population, mostly the poor, often including those who have an added symbolic value (e.g., local leaders, priests, health workers, local civil authorities and teachers) (Pedersen, 2002). In addition, the lives of ethnic groups and

[1] Low-intensity warfare is a "total war at the grass roots level" (Walhelstein, 1985), where the local population and not the territory is the target for psychological warfare, terrorisation and other traumatic experiences.

indigenous peoples are increasingly under threat as they attempt to defend their land and possessions from incursions by insurgent groups and the military, mining and timber companies, drug traffickers and drug enforcement operations, corrupted government officials and disruptive development projects (Pedersen, 1999).

Contemporary wars and changes in war strategic targets and warfare styles and technologies (e.g., aerial bombing) have led to a significant increase in the number of civilian casualties, now making up approximately 90% of all war-related deaths (Pedersen & Kienzler, 2008).[2] The global impact in numbers of accumulated civilian deaths is thus considerable. Psychological warfare is a devastatingly effective central feature in these contemporary wars, where terror is infused and atrocities are committed, including massacres and mass executions, desecration of corpses, disappearances, torture and rape are the norm (Summerfield, 1995; Pedersen, 2002).

These new forms of warfare and their devastating consequences can be observed across all regions of the world. In Africa, the style of warfare has shifted dramatically in recent years. Emerging rebel movements are mushrooming and the continent is now plagued by countless small scale "dirty wars" with no front lines, no battlefields, and no distinctions between combatants and civilians. Many of the recruits are children and young adolescents who are engaged in a vicious circle of gang-rape, pillage and crime, leaving behind a trail of mutilation and murder, trauma, deaths, despair and suffering (Reno, 2012).

The Arab league countries also have a distinct experience of revolt and rebellion against authoritarian regimes and a recent history of violent military repression, with a high death toll among civilians engaged in massive demonstrations and exposed to different forms of organised violence. The siege and bombardment of cities, the use of heavy artillery and aerial bombing, and other abusive and repressive measures, including harassment, jail, torture, suicide bombings, and summary executions, are common occurrence in countries such as Syria, Libya, Yemen, Egypt and the occupied Palestinian Territories, among others, resulting in large numbers of civilians killed and wounded, yet the total number of fatalities remain unknown.

[2] In recent war scenarios, such as in the former Yugoslavia and Somalia, about 9 out of every 10 people injured or killed were civilians.

In South and Central Asia, apart from the two major wars being fought in Iraq and Afghanistan which are responsible for thousands of lives lost and millions of displaced populations and refugees, numerous protracted ethnic conflicts have erupted and continue to engulf the region in organised violence, resulting in high death tolls, particularly among civilians and enrolled militias, resulting in massive population displacements and increasing numbers of refugees. Prime examples of these are the ongoing ethnic conflicts in the Kashmir region between India and Pakistan, Tibet in southern China, Bhutan, Nepal, and Sri Lanka. In the case of Nepal there were more than 10,000 people killed and thousands suffered torture, rape and other form of physical and psychological abuse. Sri Lanka has been shaken by a long standing ethnic conflict between the Sri Lankan Sinhalese majority government and the Liberation Tigers of Tamil Eelam (LTTE) which divided the country in a brutal conflict and war that lasted well over two decades (1983-2009).

In the Latin American region, there are many recent examples of ethnic conflicts and internal wars resulting in high death tolls, particularly among indigenous peoples: the almost four decades of violent conflict and massive killing of more than 200,000 civilians, mostly of Mayan origins in Guatemala, the extra-judicial executions of Miskito Indians in Nicaragua; the murder of Tzotzils in Chiapas, Mexico, and Yanomami Indians along the border between Venezuela and Brazil; and the annihilation and disappearance of 70,000 civilians, mostly Quechua-speaking peasants in the Peruvian highlands, undertaken by Shining Path guerrillas and the military repression (Pedersen, Gamarra, Planas & Errazuriz, 2003), are some of the exemplary cases in point.

In addition to the mounting number of casualties, these conflicts have resulted in large flows of refugees and internally displaced persons (IDPs). For example, the 2010 UNHCR Global Trends Report (2011) shows that there were 43.7 million forcibly displaced people worldwide at the end of 2010, the highest number since the mid-1990s. Of these, 15.4 million were refugees, 27.5 million IDPs, and 850,000 asylum seekers of whom 15,500 are unaccompanied or separated children. Although demographic information on displaced populations is not always available for all countries, some recent estimates indicate that women represent half of most populations falling under UNHCR's responsibility. In all, a significant

proportion of the forcibly displaced populations and victims of genocide and armed conflict in the world involve mostly the poor and politically marginal, so called "Fourth World" peoples (Pedersen, 2002).

Violence, war and gender inequalities

In many of the countries and regions described above, women have borne the brunt of armed conflicts and disasters, as part of the disempowered ethnic and social groups at war. Contemporary wars and low-intensity conflicts had a range of negative impacts exacerbating social and gender inequalities at all levels (Singh, 2004a, 2004b, 2004c), particularly in rural areas where most of the conflict has been concentrated. In particular, there continues to be minimal inclusion of women in all leadership positions, including political appointments in local and regional governments (Pedersen, 2002; Thapa & Sijapati, 2003; Hutt, 2004).

The numerous negative effects of armed conflicts endured by women can be seen worldwide. In a survey (N=353) we conducted in 2001 among Quechua populations in the Peruvian highlands, the most affected people, as measured by the presence of trauma-related disorders such as PTSD, were adults over 50, mostly women with no schooling, widowed or separated and with little or no stable source of income (Pedersen et al, 2003). In Nepal, on the other hand, Maoists have capitalized on the plight of women, who have been marginalized for decades in Nepalese society and enrolled them into the conflict in large numbers. It has been estimated that approximately one third of all Maoist rebels were women (Maskey, 2003; Pettigrew & Shneiderman, 2005). Social inequalities, poverty and war have contributed to an increase in the trafficking of Nepalese women and girls; it is estimated that each year 5,000 to 10,000 Nepalese females are abducted into Indian brothels (Mishra, 2005).

During the 36-year long "low intensity" war in Guatemala there were over 200,000 people killed or disappeared, and between half a million and 1.5 million people displaced, the majority of whom were women. More than 80 percent of the victims were indigenous Mayan people, where women can be counted as a clear majority among survivors. The estimated number of war orphans (from one or both parents) is about 200,000, and widows are at least one third of that figure (Wearne, 1994). Today, in the streets of Guatemala City, *feminicidios* – expressed as the murder and dismembering of women – has become a common feature of city

life. The social science literature has shown that in societies where violence has become a norm —like war or low-intensity conflicts—higher rates of interpersonal violence are expected to follow (Breiner, 1992; Godoy-Paiz, 2008).

In Sri Lanka, women who were exposed to trauma during and after the war suffered from poor mental health outcomes (Galappatti, 2003), including increased rates of depression and anxiety, trauma-related disorders, alcohol and substance abuse, medically unexplained somatic symptoms and poor subjective health, as well as other health problems, like sexually transmitted diseases (i.e. HIV/AIDS) and unwanted pregnancies. Natural disasters such as the tsunami may have had a different impact on the mental health of girls and women compared the effects for men and boys (Scheper, Parakruma & Patel, 2006). Furthermore, in certain cultural and religious contexts, women exposed to rape or other forms of sexual violence are often severely stigmatized, sometimes for life, and thus may be at risk of social isolation and ostracism should the experience become public knowledge. This stigmatization is especially acute for women who have borne a child resulting from rape by an enemy. However, since not all women exposed to interpersonal or collective forms of violence experience poor mental health outcomes, research needs to be conducted examining protective factors contributing to resiliency, healing, and coping strategies.

Post-conflict/post disaster relief efforts have tended to be male-centered, which is not only unsound but reflects already existing gender inequities which are accentuated in these situations. Furthermore, although women and girls comprise over 65% of displaced persons (Kottegoda, 1999), they are often invisible in planning post-conflict or post-disaster operations. Emergency management agencies and others responsible for emergency relief such as first responders, fire personnel and law-enforcement agencies are primarily staffed by men; thus, recovery efforts tend to overlook or sub-estimate women's specific needs.

While there are substantial variations in how cultures define gender roles, in many societies the identity, social status and roles of women emphasize their relational linkages with their father, husband, and children. The loss of one of these social anchors through war or natural disaster may be devastating to women's social status and identity, placing them at high risk for psychological distress (WHO, 2003). Widowhood, loss of loved ones, grief and social disruption,

displacement and loss of livelihood, and forced conscription as soldiers or military service all impose an additional health burdens on women and female adolescents. As providers of water, food and firewood for their families, women in traditional societies may be forced to enter unsafe areas increasing their risk for disease and injury (i.e., mined fields) while taking a personal risk for the well-being of their loved ones. Excess deaths among women have been well documented following many natural disasters such as the cyclone that hit Bangladesh in 1991 or the tsunami in Sri Lanka in 2004 (Oxfam International, 2005).

In general, women in LMIC countries have been exposed to additional and exceptional trauma risks during and following their respective conflicts and wars, as well as in refugee camps at the end of the war, including various forms of interpersonal violence: rape, incest, forced marriage and body mutilations, unwanted pregnancies, gang rape, sexual slavery, sexual work and sexual abuse and exploitation (Shanks & Schull, 2000; Ward & Vann, 2002).

Violence, psychological trauma and mental health outcomes

Until now, not enough attention has been paid to trauma related health problems, including local patterns of distress and psychosocial consequences, and we have only limited knowledge of the effectiveness of mental health interventions provided to traumatized individuals and affected communities (Allden et al., 2009).

Over the last few decades, the language of violence, terror and dislocation has often been conflated with the discourse of trauma. In Western popular and professional discourses, "trauma" has undergone a true metamorphosis and has become a dominant category to explain not only the origins or cause of other health-related problems, but also the consequence of exposure to violence. It is especially after the 9/11 events in the U.S that trauma has become an emblematic category that is invasive in everyday life and has reached epidemic proportions: the media, the lay public and the scientists, the sports and the arts, are all claiming the universality of trauma as a unique and unavoidable outcome of exposure to violence. In this context, trauma has almost become synonymous with PTSD in both popular and scientific thought (Young, 1995).

It was in 1980 that PTSD was adopted as a diagnostic category by the American Psychiatric Association and included in the 3rd edition of the Diagnostic and Statistical Manual (DSM-III). The early versions of DSM-III described PTSD as being a disorder restricted to those

victims directly affected by events “outside the range of ordinary human experience”. More recent versions of the DSM, on the other hand, apply the trauma construct to distressing everyday occurrences, such as a road accident, a difficult birth, a mugging incident, or hearing the news that a significant other has died (Summerfield, 1999).

While the concept of trauma appears to be universal, it has, in fact, been described in many different ways in specific populations throughout the past three decades. The ever expanding and inclusive definition of trauma has made the objective assessment of its existence problematic and one should exercise caution when trying to measure its occurrence and persistence over time. It is further important to distinguish between what constitutes a normal vs. an abnormal or pathological reaction among civilians exposed to life threatening circumstances. On the one hand, medical experts have tended to consider most reactions to traumatic experiences as psychological abnormalities. On the other, critics argue that it cannot be assumed people globally understand their suffering through the “prism of psychology” (Pupavac, 2004). For example, Weine et al. (1995) state that Bosnian teenagers who survived ethnic cleansing and migrated as refugees to North American cities had, in fact, intrusive memories of their recently experienced traumatic events, yet “…they did not view having these memories as being abnormal or pathological but as an understandable response to tragic occurrences.” They did not see themselves as victims of a horrific singular event, but understood their experiences as a collective assault on their peers and their people, which holds specific collective meanings.

Several studies reveal that it would be simplistic to regard survivors of intentional violence as passive receptacles of negative psychological experiences and effects. On the contrary, the studies often show survivors reacting in a problem solving way attuned with their environment by negotiating disrupted life courses, loss of status, and culture shock, with the attitudes of the host society, thereby, shaping themselves, their communities, and ultimately the legacy of war itself (Almendom & Summerfield, 2004; Jones, 2004; Summerfield, 1998). According to these critics, new questions have to be asked in order to conduct adequate research that does not follow a medicalised model of care, systematically offering psychiatric counselling and psychological support to people who have been exposed to traumatic experiences, but who may not be in need of professional care. As we will see below, this has important implications in

the way societies react and provide assistance to civilian populations affected by armed conflict and war.

Treatment and intervention strategies for trauma-related disorders

To close this section on the context and situational analysis at the point of departure of the TGH program, we would like to review what can be done in response to PTSD and trauma-related disorders and what are the most current therapies and collective interventions being used in civilian populations in the aftermath of organised violence, armed conflict and war-related adversities.

There is now a wide repertoire of therapies to deal with trauma-related disorders ranging from cognitive-behavioural therapy (prolonged exposure therapy) to meditative techniques derived from Eastern traditions aimed at relieving suffering through spiritual development, to the use of psychopharmacological agents, such as antidepressants or medications that interfere with fear conditioning. At present, the effectiveness of these therapies, both psychosocial and pharmacological, in diverse populations, remains uncertain. For many patients exposed to massive trauma, the complete remission of symptoms may be an unattainable treatment goal (Marshall, Davidson, & Yehuda, 1998). While it is possible that aspects of PTSD might be prevented or treated by medication and exposure therapy, in the case of long-standing violence and enduring social disruption such focused interventions are bound to have limited impact.

While various forms of mental health intervention may have a role to play in post-conflict or post-disaster recovery, the medicalisation of psychosocial intervention programs in terms of PTSD and related constructs often leads to the uncritical application of symptom check-lists and provision of “trauma counselling” (Dwyer & Santikarma, in press). This approach reflects our limited understanding of the relationships among the range of possible health outcomes after exposure to catastrophic and traumatic events (Young, 1995; 2000). Moreover, at a clinical level, we know little of who should (or should not) receive individual intervention, and still less about how and why it may work in some cases and not in others. Most ongoing efforts and humanitarian interventions carried out by government agencies and NGOs have not been assessed in terms of health outcomes and overall impact in the quality of life and well being of local communities and beneficiaries.

There is a long-standing controversy among researchers, health professionals, and health planners involved in post-conflict/disaster interventions or program implementation about the relevance and cross-cultural applicability of conventional psychiatric constructs of trauma, particularly posttraumatic stress disorder (Summerfield, 2004). While international experts and organizations have argued that the response to traumatic events and stressors involves a universally recognizable patterns, including diagnosable medical conditions of acute stress disorder and chronic PTSD, that are amenable to Western standard treatments (van Ommeren, et al, 2005), the critique from health and social scientists working within affected communities suggests that traumatic events have far broader, more varied and complex meanings and effects than are recognized by conventional psychiatric nosology or practice (Kirmayer, 1996). These effects, in turn, evoke a wide range of culturally specific adaptive strategies that are poorly understood.

Mental health services. In spite of the rising global burden of mental illness, mental health continues to be the lowest priority in the health sector in most countries of the world. Resources for mental health are insufficient and particularly inadequate in LMICs, where the government sector allocate the bulk of their very limited financial resources to custodial mental hospitals, where long-term treatment has proven to be ineffective, or, worse, harmful and in violation of human rights. As a consequence, estimates for untreated serious mental disorder in poor countries go as high as 85.4%, despite the fact that effective treatments for these conditions exist (Saxena et al, 2006).

The discrepancies between the resources available and the needs for mental health care are dramatically increased during and after emergencies, in particular in post-conflict and post-disaster situations. After massive exposure to extreme situations such as war or natural disasters the demand for psychosocial support is likely to increase, yet some of the commonly used interventions including psychological debriefing and benzodiazepine medication may be not only ineffective, but actually harmful in the management of traumatic stress (NIMH, 2002). Indeed, the development of trauma-focussed interventions or specialised counselling for PTSD cannot take the place of basic mental health programs. The provision of trauma-focussed services may be important, but its delivery is best integrated in general health services and/or general social

services (Saxena et al, 2006), along with interventions in other critical sectors, such as education and justice.

The therapeutic moral order. The aftermath of contemporary wars is partly characterised by the overall re-ordering of post-conflict post-war politics and the emergence of a 'therapeutic moral order', which is largely driven by the premise discussed above that not only combatants but entire civilian populations exposed to the adversities of endemic violence and armed conflict are traumatized and require therapeutic management of one kind or the other (Moon, 2009). That is, in the post-conflict and post-disaster operations psychiatric teams or trauma counsellors are often mobilised under the assumption that trauma-related disorders will necessarily affect most, if not all of the exposed.

At the same time, it is acknowledged that states recently emerging from armed conflict or under endemic and protracted organised violence –such as the countries participating in this initiative– have inadequate mental health resources due to a lack of funding, reduced health budgets, and a shortage and inequitable distribution of mental health professionals (Allden et al., 2009; Al-Obaidi, Budosan and Jeffrey, 2010). In order to ameliorate this situation, the funding and delivery of humanitarian aid is increasingly organized by international and local NGOs, and most current therapeutic interventions are exported and adopted from Western countries with little adaptation from to war-torn societies worldwide.

Miller and Rasmussen (2010) have made an important distinction with regards to treatment and intervention strategies, based on a cleavage existing between trauma-focused approaches versus psychosocial frameworks to understanding and addressing mental health needs of populations affected by armed conflict and war. They further stated that underlying these two main approaches there are fundamentally different assumptions regarding the factors that most influence mental health outcomes in conflict and post-conflict settings.

For those so called trauma-focused advocates, the critical factor involved in the causality chain is the single and direct exposure to a traumatic event, a belief which in turn is fueled by the growing clinical field of psycho-traumatology. In contrast, for those grouped as supportive of a wider psychosocial approach, the attribution of causality focus primarily on the overall stressful social and material conditions caused or worsened by armed conflict, including other prior or

coexisting conditions such as extreme poverty and malnutrition, or those derived from internal displacement and refugee status often resulting in loss of social and material support.

Practitioners and scholars in the field of humanitarian assistance largely agree that despite the plethora of available treatment options,[3] there remains an absence of a solid evidence base for most mental health and psychosocial support interventions (Allden et al., 2009). A similar claim was raised by the Institute of Medicine (IOM), who in 2008 published a report with a systematic review of the scientific evidence on treatment modalities for PTSD. The report states that for all drug classes and specific drugs reviewed in each of the classes, the evidence is inadequate to determine efficacy in the treatment of PTSD among war veterans. With regard to psycho-therapies the committee states that only for exposure therapies is there sufficient evidence to conclude its efficacy in the treatment of PTSD (IOM, 2008).

A prior report, entitled the Red Cross World Disaster Report (ICRC, 2000), sharply criticized international mental health initiatives for their lack of evidence and standardization and issued a call for standards to be adopted so as to better structure relief efforts. It was partly in response to this report, that standards were developed such as the Sphere Handbook, which was revised in 2004 to include international guidelines for treating psychological trauma (Sphere Project, 2004). According to the handbook, access to psychological first aid should be guaranteed to individuals experiencing acute mental distress after exposure to traumatizing experiences. It is further argued that acute distress following exposure to psychological trauma is best managed following the principles of "psychosocial first aid" which include: "basic, non-intrusive pragmatic care with a focus on listening but not forcing talk; assessing needs and ensuring that basic needs are met; encouraging but not forcing company from significant others; and protecting from further harm" (p. 293). Similar reports have been published by the WHO (2003) on "Mental Health in Emergencies" and the Inter-Agency Standing Committee (IASC,

[3] Pharmacotherapy includes medications such as alpha-adrenergic blocker prazosin, betablockers such as propanolol, novel antipsychotics such as olanzapine and risperidone, monoamine oxidase inhibitors, phenelzine and brofaromine, selective serotonin reuptake inhibitors (SSRIs) and other antidepressants. Psychotherapies include exposure therapies, Eye Movement Desensitization and Reprocessing (EMDR), cognitive restructuring, defusing and psychological debriefing, psychological first aid, testimony methods, coping skills training, and group therapy among others.

2007), stating that it is crucial to protect and improve people's mental health and psychosocial wellbeing in the midst of an emergency through well-organized psychosocial intervention strategies.

2. THE PROBLEM

Conceptual framework and research questions

Our conceptual framework is based on the assumption that the mental (mind) and physical (brain or body) are linked in complex ways largely determined by social structures, modeled by culture and mediated by social position. In attempting this "mysterious jump from mind into body" – as postulated by Felix Deutsch – we stay away from the oversimplified linear causality model of psychosomatic medicine and adopt a more dynamic, transdisciplinary, structural and interpretative conceptual frame. Theories that consider mind and body to be distinct kinds of substances or natures are becoming increasingly obsolete. Instead, they give way to transdisciplinary conceptual frames that emphasize novel ways of perceiving body and mind, acknowledging the subjectivity of the illness experience and expression of distress, and recognizing that symptoms are simultaneously connected to social context, life experience and health and illness outcomes. For instance, it is recognized that neurobiology is based on the unbreakable relationship between a person's life experience (biography) and the modeling of his/her biological memory, the coding of neural networks along the personal history, and the bio-psycho-social dynamics of higher consciousness and subjectivity (Dongier, Engels, & Ramsay, 1996). Biology should not any longer be seen as a rigid, monolithic structure but as a dynamic, interpersonal, historical, and evolutionary process (Eisenberg, 1995).

However, little is known about the particular pathways that connect biology, inner life experiences and social inequalities. In the mental health field, questions remain open of how expressions of distress and symptoms are produced, constructed and experienced by different peoples or cultures under varying social, material, political and psychological conditions (Marmot, 2005; Nichter, 2010). While research on narratives of distress has emphasized the taxonomies of pain, distress and disorder, it has not sufficiently contributed to our understanding

of the interrelations between poverty and adversity as health determinants, or how history and culture mould local narratives and endow them with meaning (Bracken, 2001; Almedom & Summerfield, 2004; Dargouth & Pedersen, 2004). The Holocaust and other genocides have forced consideration of the effects of massive human rights' violations on the survivors as well as on subsequent generations. The experience of refugees has also drawn attention to the impact of displacement, forced migration, and torture on mental health (Kirmayer, Kienzler, Afana, and Pedersen, 2009).

Based on these new transdisciplinary conceptual frames the Trauma & Global Health (TGH) program focuses on the following questions: How is the social world connected to psychological and biological phenomena and, in turn, how does this translate into narratives of distress and suffering? How is this complex of interrelated phenomena perceived and reflected in the narratives of distress and suffering? How much of the idioms of distress and symptoms are due to social exclusion, persistent social and economic inequalities, and early life experiences? How are exposure to violence-related stressors connected to mental health outcomes such as PTSD, depression and anxiety? What are the processes by which poverty and trauma-related conditions relate to the soma (the body-mind) and to the expression of distress and disorder?

Our central concern in this global health research initiative are the consequences and main health outcomes experienced among civilian populations affected by endemic conflict, protracted violence and contemporary wars, including natural disasters. We posit as a unique challenge now and in the years to come to better understand not only what are the most obvious direct consequences and health outcomes of conflict and war, but also (a) *which* political, social and environmental factors are of relevance to explain mental health outcomes, including trauma related disorders; (b) *how* these factors interact and *what* links, paths or mechanisms might explain their impact or influence on the health of populations around the globe; and c) *how* does this web of causes, linkages and pathways determine the level of suffering, disease, disability and death in a given population? The future global health research agenda should be focusing on not only the short, but also the longer term impact in those exposed to violence and traumatic events. Moreover, we need to continue searching for new ways of preventing violence and conflict, reduce its *sequelae* and impact in affected populations, and develop innovations for

effective treatment and improved recovery and rehabilitation strategies, both at the individual and the collective levels.

Country profiles: Guatemala, Nepal, Peru and Sri Lanka

The four participating countries: Guatemala, Nepal, Peru and Sri Lanka, involved in this global health research initiative share a history of colonization and dependency, the presence of sizable indigenous groups and different ethnicities and languages, and distinctive social, political, religious and cultural attributes. All four countries have in common large segments of the population living below the poverty line, with increasing numbers living in extreme poverty, persistent social inequalities, exclusionary practices against women and indigenous peoples, a history of racism and discrimination against ethnic groups, poor governance and corruption at various levels, an inefficient justice system, and above all, an experience of both episodic natural disasters (e.g., earthquakes in Peru; hurricanes in Guatemala; tsunami in Sri Lanka; droughts and floods in Nepal), and a history of *protracted* and endemic political violence, armed conflict and wars. While they all share a recent history of extreme violence and adversity which, in addition to a high death toll, resulted in massive displacement of populations, there are significant differences within and between the four countries with respect to social stratification, religion (Buddhism, Catholicism, Christian Evangelism, Hinduism, Islam and syncretic forms of popular religions), cultural values, and level of education, as a result of which each society has distinctive ways of experiencing illness and distress, different attributions of causality, and ways of explaining adversity, and a wide variety of coping strategies and healing traditions, both indigenous and foreign (see Table No. 1).

Table No. 1

Country Profiles: Population groups, socio-cultural characteristics, and civil wars and natural disasters

	Guatemala	**Nepal**	**Peru**	**Sri Lanka**
Population	14,376,900	28,951,852	29,907,003	21,513,990
Ethnic groups	Mestizo and European (59.4%), K'iche (9.1%), Kaqchikel (8.4%), Mam (7.9%), Q'eqchi (6.3%), other Mayan (8.6%), indigenous non-Mayan (0.2%)	Chhettri (15.5%), Brahman-Hill (12.5%), Magar (7%), Tharu (6.6%), Tamang (5.5%), Newar (5.4%), Muslim (4.2%), Kami (3.9%), Yadav (3.9%), other (32.7%), unspecified (2.8%)	Amerindian (45%), mestizo (37%), Caucasian (15%), African, Japanese, Chinese, other (3%)	Sinhalese (73.8%), Sri Lankan Moors (7.2%), Indian Tamil (4.6%), Sri Lankan Tamil (3.9%), other (0.5%), unspecified (10%)
Religions	Roman Catholic (50-60%), Protestant (40%), indigenous Mayan beliefs	Hindu 80.6%, Buddhist 10.7%, Muslim 4.2%, Kirant 3.6%, other 0.9%	Roman Catholic (81.3%), Evangelical (12.5%), other (3.3%), unspecified or none (2.9%)	Buddhism (76.71%), Islam (8.49%), Hinduism (7.88%) Roman Catholicism (6.06%)
Civil Wars and Natural Disasters				
Civil wars (duration)	1960–1996	1996–2006	1980–1992	1983– 2006/ 2006–2009
Numbers of people killed and disappeared	200,000 people killed and 38,000 people disappeared (80% of the victims were of Mayan descent)	13,000 people killed and 1200 people disappeared	70,000 people killed and disappeared (3/4 of the victims were Quechua native speakers)	70,000 people killed
Natural disasters	Hurricane (2005) Tropical storm (2010)	Floods (2002) Floods (2010)	Earth quake (2007)	Tsunami (2004)
Numbers of people killed and left homeless	1,500 people killed (2005) 150 people killed (2010)	422 people killed (2002) 100 people killed and 847 families homeless (2010)	500 people killed and 100,000 homeless	31,000 people killed and 835,000 homeless
Poverty and unemployment rates 2010				
Population below poverty line	56%	31%	44.5%	23%
Unemployment rate	3.2%	46%	8.1%	5.9%
Human Development Index 2010				
HDI	0.560	0.428	0.723	0.658
Income	0.517	0.308	0.607	0.523
Health	0.804	0.751	0.850	0.861
Education	0.422	0.349	0.731	0.623

In order to complete the description of this section on the problem we will now turn to a brief description of the sociopolitical contexts prevailing in each of the participating countries: Guatemala, Nepal, Peru and Sri Lanka (for a more detailed description see the Country Reports in *Annex X*).

Guatemala

Guatemala has a turbulent history characterized by five centuries of colonization and a succession of military and civilian governments, as well as a thirty-six year civil war which is considered to be the bloodiest in Latin American history. The civil war had left more than 200,000 people dead and had generated, by some estimates, more than1 million internally displaced and refugees (Human Rights Watch 2012). Most of those responsible for the atrocious crimes have enjoyed legal impunity, and the first arrest of a top-ranking official for human rights violations was only achieved in 2011.[4]

Violence continues to be a major problem in Guatemala. Systemic human rights violations and high rates of fire-arm possession and use are driving everyday crime (Godoy-Paiz, 2008). Growing homicide rates, increasing rates of murders of women, children and youth, gang violence, robberies, kidnapping, armed assault, and theft, are all endemic in the country. This is supported by the United Nations Development Program report (UNDP, 2007) stating that "in [Guatemala] the past seven years homicidal violence has increased more than 120 per cent going from 2,655 homicides in 1999 to 5,885 in 2006." Moreover, attacks and threats against human rights defenders are frequent, which significantly constraints human rights work throughout the country (Human Rights Watch, 2012). Guatemala has been transformed in recent years as a drug trans-shipment corridor with visible results: homicide rates have climbed sharply from an already high 24/100,000 in 1999 to more than 41/100,000 in 2010 (Guillermoprieto, 2012).

Recent political developments include the election of the former army general, Otto Pérez Molina, on 6 November 2011. He is the first former military leader to become an elected president in Guatemala after the end of the regimes of the 1970s and 1980s. His right wing party,

[4] General Héctor López Fuentes, former defense minister in the *de facto* government of General Mejía Victores, was imprisoned for his role in massacres committed between 1982 and 1983.

Partido Patriota (PP), was able to pass a social housing law, pushed through legislation to create a Ministry of Social Development, and ratified the Treaty of Rome, which allows the International Criminal Court (ICC) to try Guatemalans for crimes against humanity and genocide (the Treaty of Rome had been blocked for more than a decade) (Economist Intelligence Unit, 2012). Despite these hard line measures, it is important to emphasize that Guatemala's law enforcement institutions have continued to prove incapable of containing the powerful organized crime groups and criminal gangs (Human Rights Watch, 2012), which now has been aggravated by the drug cartels operating throughout Guatemala with impunity.

Finally, the provision of social and mental health services to the survivors of political violence and their relatives has yet to be fully addressed (Foxen, 2010). A group of governmental and nongovernmental agencies, including the TGH Guatemala program, have called attention to these problems, as well as have tried developing interventions in selected districts and at various levels, to reduce the burden of mental illness among survivors with support from international organizations and donor agencies, with fairly limited results.

Nepal

Nepal is a post-war country recovering from a 10-year civil war between armed Maoist insurgents and government forces. Throughout the civil war, security forces were responsible for hundreds of extrajudiciary killings, widespread torture and disappearances (for some years, it shows the largest numbers in the world). Maoist forces, on the other hand, abducted, tortured, and killed civilians whom they suspected to be against the revolution; obtained "donations" in cash and in species from villagers; forcefully recruited children as soldiers and abducted students for political indoctrination (Human Rights Watch, 2009). Since the peace negotiations in 2006, Nepal's population struggles with poverty, severe health challenges and structural violence. Both the army and the Maoist insurgents have failed to cooperate with police investigations, and so far not a single perpetrator has been brought to justice before a civil court (Human Rights Watch, 2010). Social fear and mistrust among the population remain deep due to continuing intimidation and violence, revenge killings, and widespread torture (International Crisis Group, 2010).

These complex and seemingly intractable problems relating to the structure of the state impact negatively on the political effectiveness and are predicted to remain much unchanged in the immediate future. Following a nation-wide election in April 2008, Nepal was declared a federal democratic republic and the monarchy was officially abolished one month later. The Maoists received the majority of votes in the Constituent Assembly (CA) election and formed a coalition government in August 2008. However, political tensions did not subside and in May 2009, the Maoist led government was overthrown and a new coalition government instituted. Faced with the obligation to draft a new constitution, the imminent deadline of November 30th 2011 has been once more extended of another six months by the main political parties in Nepal's CA. The Supreme Court ruled that this extension must be the last, fixing May 30th 2012 as the final deadline by which a new constitution must be promulgated. At the time of closing operations of the TGH program in Nepal (December 2011), the Prime Minister, Baburam Bhattarai, sought support from the main opposition Nepali Congress (NC) party to amend a landmark agreement that had been signed in November concerning the reintegration and rehabilitation of former Maoist fighters, but the NC refused.

The continuing political and economic uncertainty, unrest and structural violence have a great impact on the work of the Center for Victims of Torture (CVICT), the non profit and non-governmental organization working jointly in partnership with the TGH program.

Peru

The Peruvian historical record suggests a long history of conflict and collective violence. The most recent conflict ignited in 1980 between Shining Path and government forces, carrying with it many centuries' old forms of repression and discrimination against indigenous peoples, but creating novel forms of extreme violence, instilled terror, and enforced militarization of daily life.

In 2003, the well-known and publicised 5,000 pages Truth and Reconciliation Commission report (www.cverdad.org.pe/ifinal/index.php) found that more than three-quarters of the victims in the Peruvian conflict were Quechua native speakers, mostly rural poor and

illiterate, reflecting the deep-rooted "veiled racism and scornful attitudes that persist in Peruvian society, almost two centuries after its birth as a Republic." (CVR Final Report, 2003).

Although Peru has been recently reclassified as an upper-middle income country by the World Bank, it still ranks 63 out of 180 countries in the Human Development Index (UNDP, 2010), 50% of the population live under poverty, and demographic and health indicators hide deep inequalities especially between rural and urban areas. Violence is escalating as it is the case in most Latin American countries; during the past year prevalence of physical violence against women was reported in the increase (about 17% in Lima and 25% in Cusco), sexual violence (7% in Lima and 23% in Cusco), and physical or sexual violence (18% in Lima and 34% in Cusco). Violence as a social conflict is escalating as well. According to the Ombudsman General Office (Oficina de la Defensoria del Pueblo), in 2008 there were 260 registered social conflicts, out of which 2/3 were still active after a year. Recently, a conflict erupted around the development of the Minas Conga project, which is expected to produce between 580,000 and 680,000 ounces of gold per year, starting in 2015. Local residents are concerned that the mine's proximity to a water basin will cause pollution and sap vital water supplies. Several protests and strikes have resulted in violent clashes between protesters and police, in which the latter appear to have used unlawful force (Human Rights Watch, 2012). Meanwhile, the president elect Ollanta Humala tried to buy time by hiring independent foreign consultants that will review the mining project's contested environmental impact assessment (Economist Intelligence Unit, 2012). In June 2008, clashes between indigenous protesters in the Northern city of Bagua, Amazonia, and the Police forces, resulted in the death of dozens. In response to these events, the TGH program team held a seminar in Lima, on June 19, 2009 entitled "Mental Health and Intercultural Communication: Contributing to Social Dialogue in Amazonia. The discussions focused on general health issues the importance of constructive dialogue, mutual respect and peaceful conflict resolution between people from different cultures.

Sri Lanka

On December 26th, 2004, Sri Lanka was hit with the most deadly tsunami in the country's history causing the loss of life and displacement of thousands (Neuner, Schauer, Catani, & Elbert, 2006; Weerackody & Fernando, 2009; Wickrama & Kaspar, 2007). The catastrophic force of the tsunami exacerbated the effects of the ethnic conflict between the Sri Lankan government forces (mostly Sinhalese) and the Liberation Tigers of Tamil Eelam (LTTE), (mostly Tamils), which divided the country between 1983 and 2009. While government forces tried to separate civilians from the LTTE, the Tamil separatists forcefully recruited civilians giving them minimum training and forced them into battle (Somasundaram, 2010). Thus, thousands of civilians were trapped or displaced by the fighting, and civilian casualties increased significantly. Moreover, the displaced suffered from insufficient food, medical care and shelter no matter whether they were in the combat zone or government run "welfare villages". Toward the end of the war, approximately 300,000 civilians were internally displaced and transferred to camps in the Vavuniya District in the Northern Province. Resettlement initiatives of IDPs to their homelands in the north and east of the country have started, but, are slow and far from being completed. At the time of preparing this report, an estimated total of 30,000 persons are still interned in the camps. The International Crisis Group (2010) alleges Sri Lankan government and security forces of denying access of UN and other international humanitarian aid organizations into the affected regions, and of intentionally shelling civilians, hospitals and humanitarian operations. In turn, the LTTE is blamed of intentional shooting of civilians who attempted to flee the shelling and cross into government controlled areas and of the intentional infliction of suffering on civilians (see also Elbert, Schauer, Schauer, Huschka, Hirth, & Neuner, 2009).

The president, Mahinda Rajapaksa of the Sri Lanka Freedom Party (SLFP), was re-elected for a second six-year term in January 2010 (Economic Intelligence Unit, 2012). The ruling United People's Freedom Alliance (UPFA, of which the SLFP is the main component) also won a landslide victory in the parliamentary poll in April 2010; holding 161 seats in the 225-member legislature. In 2010, Rajapaksa's position and power were strengthened by a constitutional amendment that reduced checks on his office while, at the same time, removing term limits for the presidency. It is predicted that ethnic and political tensions in Sri Lankan

society are unlikely to lessen in the coming years. Although the UPFA states that it will address the grievances put forth by the Tamils by providing the island's provinces with more power, discrimination against Tamils will most likely remain a source of interethnic tension and social struggle in the years to come.

3. PROGRAM ACTIVITIES & OUTPUTS

Institutional framework

The Trauma and Global Health (TGH) Program stems from a partnership between the Douglas Mental Health University Institute - McGill University and research teams based in Guatemala City (Guatemala), Khatmandu (Nepal), Lima (Peru), and Colombo (Sri Lanka). The TGH program is funded by the Global Health Research Initiative - Teasdale-Corti Team Grant Program and supported by the Douglas Mental Health University Institute and McGill University.

The TGH program enables the Douglas Institute-McGill University Team and TGH Country Teams to conduct a collaborative research and action program of advanced studies, continuing education, and knowledge transfer in the social and cultural dimensions of mental health. The ultimate objectives of the TGH program are the following:

1) to reduce the mental health burden of civilian populations exposed to protracted and endemic political violence and/or episodic natural disasters;
2) to foster the process of healing, psychosocial rehabilitation and recovery;
3) to generate improved mental health policies and services in the participating countries.

Although psychological trauma has been a central concern for medical practitioners working with veterans and refugees, less attention has been paid to the mental health of civilian populations which have been confronted with extreme adversities and organized violence, such as armed conflict, wars and political upheaval, including natural disasters. Government programs, humanitarian organizations and international agencies engaged in relief operations and post conflict stabilization, have adopted models of clinical and

psychosocial intervention developed in western settings that are assumed to be widely applicable, but remain of limited social and cultural relevance and uncertain therapeutic efficacy. It is within this framework, the TGH research program has contributed to rethinking humanitarian responses and strategies for healing and coping by moving beyond the narrow psychological focus to a wider perspective of the social and cultural context in which people live, cope with and recover from potentially traumatic experiences. In doing so, the research program has contributed to reassess humanitarian responses and strategies for prevention as well as healing and coping with trauma.

The TGH program

Research and Documentation (R&D)

The R&D agenda for all four countries was developed through discussions with each TGH country team leader during the preparatory phase. Workshops and site visits were conducted, which helped selecting country sites and target populations, define research priorities and research protocols, including methodology, expected results, and ethical considerations. Depending on the case, the resulting research protocols were submitted to both McGill and local ethical review boards for approval.

In each country three basic research concerns were addressed to facilitate cross-national comparison: (1) potential trade-offs between individual and community level interventions; (2) assessment tools and collective interventions; the cultural adaptation of models of clinical practice, and (3) cultural variations in the expressions of distress and the perceived effects of trauma exposure and their culture and gender variations.

To investigate these complex issues, a mixed-methods approach was adopted that combined survey methods and qualitative research methods such as social mapping, ethnographic interviews, key informant interviews and focus groups discussions. To analyze the great scope of the findings, SPSS was used to analyse quantitative data and Atlas.Ti software to annotate, code, organize and map the qualitative data.

In all four countries, the research results identified structural and social factors operating in the larger sociopolitical and economic context (macrosocial domain) and provided insights into its interaction with cultural models of illness and local resources (microsocial domain) for coping with and reducing the negative consequences of exposure to traumatic events. Moreover, detailed information was obtained with regards to the existing models of clinical and collective interventions which allowed us, in turn, to determine their general applicability both within each site and across different sites/cultures.

Capacity Building (CB)

CB activities were developed in all four countries to enhance the ability of individuals, organizations and communities to address mental health issues and other related health concerns. The process of CB relied heavily on building and using partnerships: our North-South training activities like the McGill Summer Course or the McGill-Douglas Conferences held annually in all four countries, were followed by a "cascade" model in each country, in partnership with local universities and/or NGOs in successive years, thus enhancing capacity building within each of the participating countries.

Through these newly created channels, educational tools, training materials and research results were made available at various levels country-wide and shared across all four countries. Moreover, it was possible to strengthen the knowledge and skills of country graduates and researchers, including health and social scientists, as well as health professionals and health workers in mental health research as applied to populations exposed to episodic natural disasters and protracted violence and adversity. In addition, opportunities were created for in-service training and continuing education of health professionals and mental health workers.

Knowledge Transfer (KT)

KT, on the other hand, was understood as the iterative and timely process of integrating new knowledge and best evidence derived from the research and documentation phase, into policies, guidelines and practices of health workers, health care teams and health systems, including those of humanitarian agencies, community-based resources and relevant stakeholders,

in order to optimise mental health outcomes and individual and collective health care strategies in populations exposed to conflict and/or natural disasters.

The specific knowledge transfer country-level objectives aimed at (a) strengthening the TGH program of work for developing and further consolidating effective partnerships between researchers and research-users; and (b) increasing the competency and skills of both researchers and research–users at various levels to demand, access, interpret, adapt and incorporate research results and new knowledge into their current policies and practices. With various methods including workshops, presentations, news releases (e.g., a bi-monthly newsletter) and academic publications, the TGH country teams reached different groups of knowledge users including the lay-community, researchers and health care providers and governmental and non-governmental organizations/institutions. In order for KT to be effective in the mental health field in the diverse contexts, researchers and research-users the country teams took into account local taxonomies of illness and healing strategies, resilience and coping strategies, according to their values and traditions, religion and ideology. It was through these additional efforts that the TGH program fostered collaborations between researchers and practitioners, increased the number of publications and regional representation, and expanded access to scientific literature, as well as translated articles into languages other than English and made knowledge accessible to local actors and the lay public at large.

TGH Partner Institutions

McGill-Douglas TGH Country Team (Canada)

The Canadian team was led by D. Pedersen and had as co-principal investigators: L.J. Kirmayer, J. Guzder, A. Young and D. Groleau. The McGill-Douglas TGH Team has done extensive work on social and transcultural psychiatry, mental health, political violence and war trauma, and has gained international reputation in issues of relevance to the TGH program. D. Pedersen has extensive experience working in Latin America and the Caribbean region, and more specifically in Peru, on the psychosocial impact of organized violence and post-conflict stabilization programs (previously funded by McArthur Foundation and CIDA). A. Young has

done ethnographic and conceptual work on the social and cultural construction of trauma-related diagnoses in psychiatry and has conducted ethnographic research in the USA and other countries. L.J. Kirmayer has worked on cultural variations in trauma-related symptoms and has extensive experience working with trauma-related issues among indigenous peoples in Canada and elsewhere. J. Guzder has extensive experience in South Asian countries on the subject of trauma within her clinical experience as chief child psychiatrist at the Institute of Family and Community Psychiatry, and D. Groleau, has been working as an anthropologist in qualitative research in public health, HIV/AIDS, and trauma-related disorders. The GHRI-TC Team Grant facilitated existing partnerships to develop further, strengthen the Douglas Institute and McGill's internationalization and institutional development, and extended the current network of collaborating institutions in partnership with LMICs research teams in research and training in relevant areas of the global health research agenda. The McGill-Douglas TGH team encompass the following institutions:

a) The *Douglas Mental Health University Institute - Research Centre* (DIRC) (Associate Scientific Director, D. Pedersen). Since 1982, the DIRC have completed various research initiatives in mental health in partnership with countries of Asia, Africa, Latin America and the Caribbean. The DIRC is affiliated with McGill University and is a leading research centre in neurosciences, clinical and psychosocial research in mental health and severe mental disorders (www.douglas.qc.ca), including research on political violence and mental health outcomes, stigma and mental illness, alcohol and traffic accidents (T. Brown); PTSD and traumatic memory (A. Brunet), brain imaging, etc.

b) The *Culture and Mental Health Research Unit* (CMHRU) of the Sir Mortimer B. Davis Hospital - (JGH) (Director, L.J. Kirmayer, J. Guzder, D. Groleau) conducts research on the cultural dimensions of mental health services. It is linked with a cultural consultation service which works with culture-brokers and community organizations to provide assessments and treatment of patients from ethno-cultural communities in Montreal. Approximately 1/3 of the cases seen at the cultural consultation service are asylum seekers or refugees and a large portion come from the Indian subcontinent and Central and South America, so there is considerable experience within the service in working with these populations. The CMHRU is also the lead

centre for the National network for Aboriginal Mental Health Research, currently conducting a cross-national project on resilience among indigenous peoples in Canada and New Zealand that provided important synergies for this global health research initiative.

c) The McGill *Division of Social and Transcultural Psychiatry* (Director, L.J. Kirmayer, D. Pedersen, D. Groleau and J. Guzder) continues to maintain leadership in this area through an active program of research, training and publications and the Summer Program in Social and Cultural Psychiatry that regularly attracts graduate international students from LMICs (http://www.mcgill.ca/tcpsych).

d) The *Department of Social Studies of Medicine* (A. Young): founded in 1975, is an interdisciplinary teaching and research unit of the McGill Faculty of Medicine. Teaching and research focuses on the institutional, cultural, and technological determinants of medical knowledge and practices. Subject areas include contemporary biomedicine, pre-modern scholarly medical traditions, and indigenous non-Western systems. In its programs of graduate studies, it attempts to provide training solidly grounded in the discipline of the chosen program; and, through weekly seminars (i.e., war trauma, trauma related disorders) in interaction with McGill faculty and graduate students, provides an informal forum where graduate students, post-doctoral fellows, faculty, and visiting researchers can present and discuss their work.

e) *The Montreal-WHO Collaborating Centre for Research and Training in Mental Health*: The Montreal WHO/PAHO Collaborating Centre stands out as a repository of global mental health issues, particularly in Latin America and the Caribbean. Since the beginning of the 1990s, the Montreal Collaborating Centre has become involved in initiatives to influence mental health policies and the provision of mental health at the primary care level. It also has fostered employment support and mental health in the workplace, as well as mental health services for people with intellectual disabilities.

After 5 years of implementation, the current TGH network encompasses a large number of institutions and individuals mostly coming from the health and social sciences based in Canada and all four participating countries. The TGH program started with a total of 35 partners initially involved and today, the number of actively involved partners has grown to over 120 and continues to grow in 2012. Table 2 below illustrates the cumulative (2007-2011) number and

type of institutional partners by TGH country team at the end of the project cycle (December 2011).

Table 2

Type of Partners by TGH Country Team

	Universities and Departments	Government Organizations*	NGOs	International Organizations	Total
McGill	6	1		1	8
Guatemala	3	1	5	2	11
Nepal	2	24	3	1	30
Peru	5	32	8	4	49
Sri Lanka	4	3	6	4	17

*It includes central and local government levels.

It is interesting to note the differences in establishing partnerships of the TGH teams. The *TGH Peru team* based at the Universidad Peruana Cayetano Heredia, was very successful in partnering with government organizations at the national and local levels, whereas the *TGH Guatemala and Sri Lanka teams* were more successful at the NGOs level. Most of the *TGH Nepal team's* partners were government organizations at the local level. Table 3 below gives a progression of partners between 2007-2011showing that the *TGH Peru Team* was most successful in engaging individual partners, compared to the non-university TGH partners.

Table 3

Partners (Individuals) by TGH site and by Year

	2007	2008	2009	2010	2011
McGill	9	12	11	12	12
Guatemala	4	8	9	5	4
Nepal	4	5	6	7	7
Peru	19	33	35	55	47
Sri Lanka	4	7	15	18	18
Total	43	65	76	97	88

TGH Country Teams and Boundary Partners

The *TGH Guatemala team* was led by Victor Lopez, Director of the Centro de Investigaciones Biomédicas y Psicosociales (CIBP), an NGO devoted to research in mental illnesses and mental health, founded in 2001. Initially, the Guatemala TGH team established partnerships with: (a) two members of the Mental Health Division at the Ministry of Health (MOH); (b) a representative of Medicos Descalzos**,** an NGO founded in 1989 based in the Quiché region, dedicated to research and action programs in the field of traditional Mayan medicine and medicinal plants, and training of health promoters and traditional birth attendants (see website in: www.terreunie.qc.ca/ medicos/ espmission.htm); (c) the Director of the Master's degree program in Social Psychology and Political Violence, at the School of Psychological Sciences, Universidad Nacional San Carlos de Guatemala; and (d) members from the Centro de Análisis Forense y Ciencias Aplicadas (CAFCA), an NGO engaged in the protection of human rights and peace building, which undertakes the exhumation of bodies from mass graves, by requisition of the Public Ministry and community-based organizations (website: www.cafcaguatemala.org). Most of these partnerships were valuable to the Guatemala TGH country program initial stages of development, but their affiliation prove to be fragile and most often of short duration, as changes in personnel and program heads have been a constant feature in the unstable political environment prevailing in Guatemala and its institutions throughout the last few years. The two members of the Mental Health Division at the MOH resigned in 2008; Medicos Descalzos was practically deactivated in early 2009 and later dismantled; CAFCA faced important changes in its internal organization and the partnership with the TGH program was ended in 2009; and the Masters'degree program at the Universidad Nacional de San Carlos, was dismantled and its Director forced to resign because of internal dissent among the various political factions within the University. Finally, the TGH Country team leader, Victor Lopez, was forced to leave the country in June 2012 under severe dead threats directed to him and his family. He is currently based in Costa Rica.

In spite of all these constant changes in policies, staff and institutional configuration, the Guatemala TGH team managed to renovate and maintain partnerships with the MOH where possible, and lead the reorganization of the National Mental Health network with participation of

various agencies and organizations in Guatemala City. New linkages and partnerships were created in 2009-2010 with the Centro de Investigaciones Científicas y Sociales, at the Facultad de Medicina of San Carlos University; the Oficina para la protección de los Derechos Humanos del Arzobispado de Guatemala (ODHAG) through one of its coordinators, Ronald Solis and with Cecilia Escobar; partnership with the National Mental Health and Human Rights Network (NMHHRN) was strengthened in this last stage focusing on knowledge transfer activities; with AJPU, an indigenous (*Ixil* and *Quiche*) women organization and NGO based in the Quiche department, in the Guatemalan Altiplano (see Guatemala Country report) and with Ronald Solis and Cecilia Escobar, the Focal Point for Mental Health at the Pan American Health Organization (PAHO). These new partnerships prove to be more stable and sustainable overtime, but questions remain as to its permanence and duration given the unstable political environment.

Bhogendra Sharma, Chairman of the Center for Victims of Torture (CVICT) lead the *TGH Nepal country team*, as Co-Principal Investigator. With an extensive experience in working with victims of torture and refugees in Nepal, CVICT was established in 1990, as a non-governmental, non-profit-making organisation working to rehabilitate victims of torture and trauma, and to advocate for the prevention of human rights violations and abuses. Currently the only centre of its kind in Nepal, CVICT provides professional medical, psychosocial and legal services to those in need (website: www.cvict.org.np). CVICT was established to serve torture victims by providing "… holistic services to address a person's physical, mental, spiritual and social wellbeing, and help restore the social fabric in the family and community." (http://www.cvict.org.np). It is the first and only organization of its kind in Nepal which has remained active for the last two decades.

Initial boundary partners that joined Nepal TGH country team were the Ministry of Health and the Nepal Health Research Council (NHRC); Mark Jordans, a psychologist and advisor of the Transcultural Psychosocial Organization - Nepal (TPO-Nepal), a non-governmental organisation providing community and school-based psychosocial care for conflict-affected populations and training programs in psychological counselling in Nepal; (http://www.healthnettpo.nl/HealthnetTPO); Suraj Tapha, a psychiatrist currently based at the University of Oslo and associate to the School of Applied Human Sciences (SAHAS); Wietze

Tol, a PhD candidate at the University of Amsterdam, affiliated with Health Net TPO and TPO-Nepal; and Brandon Kohrt, a PhD candidate from Emory University, currently working in Nepal in collaboration with TUTH University. This early configuration was changed and with the exception of Suraj Tapha, all other initial partners and for different reasons separated or severed their initial affiliation with CVICT, like Health Net TPO and TPO-Nepal, which now have settled in Kathmandu, as a Nepali NGO, in direct competition with CVICT. With or without support from CVICT the PhD candidates collected their data and travelled abroad to comply with the academic requirements of their respective universities.

From 2008 onwards, the *TGH CVICT team* started collaboration with the Institute of Medicine (IOM), based at Tribhuvan University Teaching Hospital (TUTH), highlighting the increasing interest and credibility CVICT is receiving in Kathmandu. Collaboration with the Council for Technical Education & Vocational Training (CTEVT) in 2010 and with Sagar Mani Lamsal, Senior Curriculum Development Officer, it continues in an effort to receive government accreditation for the psychosocial training program; and this process has been supported by UNFPA. For effective running of the process, a steering committee consisting of members from organizations working in the field of psychosocial care and support- CVICT, TPO, APSC and PPR was formed in partnership with UNFPA. At the community level CVICT formed strong partnership with the District Development Committees of the three regions where the studies were taking place (Dan, Chitwan and Tanahu districts).

The *TGH Peru team* (8 members) was initially led by Marina Piazza, who was later replaced by Ines Bustamante, Researcher and Professor at the Facultad de Salud Publica y Administración (FASPA), at the Universidad Peruana Cayetano Heredia (UPCH). UPCH is a private university founded in 1961 (http://www.upch.edu.pe/upchvi/portada.asp), based in Lima, the Capital city. The FASPA has a broad range of experiences in developing participatory programs in public health with local communities (urban poor) in northern Lima and other regions of the country. From 1998 to 2003, the UPCH established a partnership with the Douglas Hospital Research Centre/McGill University to develop an inter-disciplinary and collaborative program of human resources development, advanced training, applied studies and community-based mental health services, focusing on priority mental health issues (UPCD-Tier 2 Linkage

Project “Mental health and human development.” (www.mcgill.ca/psychiatry/MHHD) as a result of which a Master degree program in Mental Health of Populations was created. The TGH Peru team included, the following specialists on mental health: Darsy Calderon (psychologist, JUNTOS Government Project); Gloria Cueva (psychiatrist, Director of the Mental Health Office at the Ministry of Health); Fabian Fiestas (physician, epidemiologist at the School of Sciences of Universidad Peruana Cayetano Heredia); Alfonso Gushiken (physician, specialist in violence and qualitative methodologies, associate professor at the School of Public Health of Universidad Peruana Cayetano Heredia); Luis Matos (psychiatrist, Department of Addictions, National Institute of Mental Health Honorio Delgado-Hideyo Noguchi); Maria Mendoza (mental health nurse, Department of Community Mental Health, National Institute of Mental Health Honorio Delgado-Hideyo Noguschi); Myriam Rivera (psychologist, Mental Health Section of the Human Rights National Coordinator, currently teaching at the Pontificia Universidad Catolica del Peru); and Marina Piazza (psychologist, head of the Mental Health Division of the School of Public Health at UPCH).

The *TGH Peru team* was successful in working together with national government level actors (Mental Health office of the Ministry of Health, Community Mental Health and Health Promotion at AMARES-MINSA, Public Ministry, Interior Ministry and National Safety Council, Ministry of Education.) as well as with academic entities (Pontificia Universidad Católica del Perú, and Academia Nacional de Medicina); local governments: municipalities of Lucanas and Santiago de Vado in Ayacucho, Wanchaq in Cuzco), and “Comunidades Campesinas” (peasents`associations and cooperatives). During later years, The TGH program strengthened its partnership with the Ministry of Interior and established new partnerships with the City Hall of Lima and the City Hall of the district of Miraflores, in order to launch a new initiative called *Observatorio de la Violencia* (Violence Observatory), which during 2010-2011has been progressing steadily in its implementation in some densely populated districts of Lima Metropolitana. Several new partnerships were established with the Division of Health Promotion and Health of the People of the Cuzco Regional Office of Health, with the Cuzco Regional Office of Education, including the principals of the four selected school districts to

implement the intervention that focuses on resilience and domestic violence in urban and rural schools of Cuzco.

The *TGH Sri Lanka team* (5 members) was led by Chaminda Weerackody, an independent consultant affiliated with the Initiative in Research & Education for Development in Asia (INASIA), a research and action NGO founded in 1993. INASIA worked in tandem with its sister organization - People's Rural Development Association (PRDA) which is another local NGO founded earlier in 1989. Since April 2005, C. Weerackody has been national coordinator of a study of the interface between international aid agencies and local political administrative and civil society institutions and its impact on tsunami affected communities, funded by the Norwegian Institute for Urban and Regional Research and Norwegian Ministry of Foreign Affairs. While INASIA constitutes the research arm, PRDA functions as the action oriented grassroots organisation. Shanti Fernando, Chairperson and Chief Executive of PRDA, joined as a key member of the TGH team and project manager. In addition, Mrs. Fernando is Chief Operating Officer of the Reconstruction and Development Agency (RADA), established as a national Special Agency responsible for overseeing rehabilitation and development following the tsunami and directly responsible to the President of Sri Lanka (website: http://www.rada.gov.lk).

The remit of RADA is to bring about inter-agency co-ordination and oversee work across the country in the field of health, education, social services, livelihood & shelter, rehabilitation and reconstruction. Existing linkages with the Ministry of Disaster Management and Human Rights – a government ministry formed after the tsunami -- enable the Sri Lanka TGH country team to influence policy development at a national level. RADA is the only agency or institution in Sri Lanka with the mandate to continue with the reconstruction and development work in districts affected by natural or armed conflict. These links will undoubtedly be crucial in enabling the results of the project to feed into policy-making in the psychosocial field and promoting capacity building of local institutions in this field. Harini Amarasuriya (Social Anthropologist), Gameela Samarasinghe (Psychologist) and Ananda Galappatti (Medical Anthropologist) based at SPARC are also key members of the Sri Lanka TGH Team. SPARC is composed of psychologists and social scientists affiliated with the University of Colombo who conduct research, offer courses for undergraduate and postgraduate students, and develop mental

health training programs for probation and child-care staff (http://www.cmb.ac.lk/academic/other_centers/sparc/index.php). SPARC is currently engaged in a UNFPA-funded research project on Psychosocial Assessment of Development and Humanitarian Interventions (PADHI), highly relevant to the TGH program.

After the war ended, an important late development in 2010 was the partnership renewal between PRDA-Sri Lanka with its Jaffna partner - *Shanthiham* – Association for Health and Counselling – to implement the research program on 'mental health and wellbeing' which had to be postponed due to the war between the military and the LTTE in the north until late 2009. The research concluded successfully in March 2011.

Finally, during the period of 2007-2011, Suman Fernando, Honorary Senior Lecturer in Mental Health, European Centre for the Study of Migration and Social Care (MASC), University of Kent (UK), and Visiting Professor in the Department of Social Sciences, London Metropolitan University, London (UK), was consultant to the TGH Sri Lankan Country team and to the GHRI-TC Team Grant as a whole. (For a more detailed description of new and departing institutional and individual partners please refer to *Annex I. TGH Cumulative Number of Partners*).

Monitoring and Evaluation

The monitoring and evaluation process for the TGH program was conducted annually and on a periodic basis, and it was based on a Results Based Management (RBM) approach. Each participating TGH country team conducted an annual assessment of the results (outputs, outcomes and impact) obtained in each salient activity sector: program setup, selection and allocation of fellowships, scholarships and grants, research and documentation, capacity building and local training, and knowledge transfer and extension. This outcome assessment allowed each TGH country team to set new objectives for the coming year, and enabled roll-over and annual reporting for insuring continued funding and uninterrupted implementation.

This evaluative exercise was complemented by a process evaluation using an outcome mapping (OM) approach, which was conducted at the end of year 2: Mid-Term Evaluation (MTE), and end of year 5: Final Evaluation (FE). The MTE exercise encompassed the first two years (24 months) of the TGH program implementation, from April 2007 to March 2009.

The focus of OM is on people rather than the development impact of a program, and was defined as changes in more or less subjective states – such as "policy relevance", "poverty alleviation", "improved mental health outcomes" or "reduced conflict." OM focused on one specific type of result: outcomes as behavioural change. Outcomes were defined as changes in the behaviour, relationships, activities, or actions of the people with whom the TGH program worked directly. These changes were aimed at contributing to specific aspects of human and social well-being by providing partners with new tools, techniques, and resources to contribute to the development process and TGH program implementation. Based on this definition, outcome challenges aimed at describing how the behaviour, relationships or actions of an individual, group, or institution would change if the TGH program is (extremely) successful. For each of the outcome challenges, in turn, graduated progress markers are identified. Progress markers represented the information that the TGH program can gather in order to monitor achievements toward the desired outcomes. They are generally framed in terms of 'who is doing what and how?' Cumulatively, they illustrate the complexity and logic of the change process (Earl, Carden, & Smutylo, 2001).

The OM framework was composed of a number of outcome challenges, subordinated progress markers and a questionnaire that aimed at capturing the complexity and logic of the change process affecting the TGH program as a whole. The TGH program, encompassing the Canadian-based team and four country team members (and their partners), all worked together towards the following ten main *outcome challenges*: (a) developing sustainable partnerships with government institutions, NGOs, and individuals working in mental health; (b) gaining the trust and recognition of partners so that it can contribute constructively to debates and decision-making processes in mental health at various levels; (c) establishing a minimum administrative structure to make the mission operational; (d) upgrading research capacity and research skills for conducting clinical, psychosocial and ethnographic studies; (e) developing effective and

culturally sensitive mental health interventions combining professional with local knowledge and practices; (f) generating innovative training materials for effective training and mentoring of health workers and health professionals; (g) developing evidence-based and culturally appropriate training programs at all levels, using distance learning strategies and continuing education programs; (h) providing guidelines for public health policies and designing innovative models of intervention at local, regional and national levels; (i) making acquired knowledge available to policy makers, planners, administrators and health providers in the governmental, non-governmental and community sectors; (j) promoting gender equality and gender-based comparative framework.

Since the TGH program foresaw the accomplishment of the outcome challenges (f), (g), and (h) throughout the third and fourth year of the program, they were excluded at the time of the MTE conducted at mid-term in year 3 (March 2009) and applied later, at the end of the project cycle with extension in year 5 (November 2011).

The TGH program also developed *progress markers* for each of the outcome challenges presented above in order to identify and outline the incremental degrees of change leading to the achievement of the ten main outcome challenges. Individually, these progress markers were considered as sample indicators of behavioural change, but their real strength rests in their utility as a set. These progress markers were linked to the establishment of partnerships with: government institutions; NGOs; individuals and others (i.e., academic institutions, international agencies, professional associations, local networks, etc.), the identification of similar goals with partners, the conduct of meetings with partners, consultation and information exchange with partners, participation in events organized by boundary partners or others, the establishment of an administrative structure, the development of a good understanding of the TGH program's administrative regulations, including financial issues (e.g., budget, accounting, financial reports, reimbursements of expenses, etc.), the procurement of external funding from other sources for developing mental health programs and interventions, the search for relevant TGH scientific/advocacy literature (books, journals, grey literature, periodicals, audio and visual materials, etc.), the systematization and organization of documents and publications, the distribution of scientific/advocacy literature to potential users, participation in the McGill

International Courses, selection of TGH students/staff eligible to McGill fellowships (1 month and 3 months), and exchange of education/technical support/information with TGH Douglas-McGill team leaders.

Research-related progress markers were also identified: setting-up a research agenda, complying with ethical principles of research, selecting research sites, training field workers, collecting data and analysing, presenting research findings to community leaders and other stakeholders, and finally at scientific research-oriented meetings.

In order to assess the progress markers, each TGH country team leader was invited to complete a questionnaire having specific questions for each one of the selected progress markers. Depending on the question, it was possible to simply list certain items, or provide a short answer of a few lines, or write a summary of half a page. Since promoting gender equality and gender-based comparative framework are crucial components of the TGH program, the country teams were encouraged to address these issues when answering the respective questions in addition to the outcome challenge (j) which focused specifically on gender (for the complete OM questionnaire see *Annex IX: TGH OM questionnaires*).

This process-oriented evaluation methodology was found most useful by the various TGH country teams, because it not only allowed to measure results (outputs and outcomes) in quantitative terms using the RBM approach, but also enabled performing empirical observations,[5] collecting qualitative data for a better understanding of the obstacles and processes necessary for the attainment of outcomes, and served to rollover plans and goals, and readjust processes to obtain better results in the following year.

Overall, the partnerships that were established by the five countries constitute a network that can prove very useful to continue the promotion of the TGH program objectives, including

[5] In many cases, empirical observations were conducted during monitoring field visits to selected study country sites. For example, in 2011, after a short visit to the VRAE (Valley of Apurimac and Ene Rivers) region in northern Ayacucho made by the TGH-Peru Team (with D. Pedersen), it was made evident the whole region was flourishing with coca plantations, which are now under "protection" by the drug lords escorted by Shining Path guerrillas, to discourage the incursion of the Peruvian army special forces and inspectors from the US-based Drug Enforcement Agency (DEA) and their military advisors. Corrective measures were discussed and implemented when relevant.

periodic monitoring and assessment, provided an acceptable level of funding can ensure continuity and sustainability of the program. However, it is our perception that each of the TGH country teams has reached a sufficient level of maturity, so that greater autonomy should be considered for them, leaving training, knowledge transfer, and information access roles to the Douglas-McGill TGH Team.

Research outputs

In the participating countries, the research agenda was defined through field visits and discussions conducted between the Douglas-McGill TGH Team with each TGH Country Team during the preparatory phase workshops and early site visits made during 2007 and later revised in successive years depending on country and site-specific demands. The research agenda discussed included the selection of TGH research themes according to local priorities, accessibility to country sites and target populations, research design, methodological issues and ethical considerations, timeline and budget available.

The TGH research component consisted therefore of several research projects conducted in parallel in all four countries with the aim of collecting baseline data on mental health and trauma-related disorders, identifying local issues and priorities for further research, and translating research results into policies and action programs, including focused mental health interventions, most of which have been completed and/or are in their final stages and are ready for publication. The TGH country teams were able to follow closely the program of work originally planned and new initiatives were later added to the initial number of studies, according to locally-defined priorities.

The *TGH Peru team* was able to carry out a greater number of studies and pilot interventions. In terms of outputs, five journal articles have been published or accepted at the time this final report was being written and within the next year or so we expect this number to rise as several papers and a book are being prepared and submitted for publication. The *TGH Peru team* was largely made up of university-ascribed researchers and therefore were more active in research initiatives and pilot interventions, yet the number of peer reviewed publications remained low.

The *TGH Sri Lanka team* was to follow in the number of studies/interventions and has been very strong in transferring the knowledge acquired in the form of articles, conferences, presentations and books and chapters. Guatemala and Nepal conducted less number of studies and pilot interventions, and much of their outputs are limited to presentations and research reports. Overall, in terms of research the productivity of TGH country teams has been variable, as each country faced a different context and confronted multiple obstacles and limitations as well as "windows of opportunity" which were used along a previously agreed timeline. For example, fields operations were restricted in Sri Lanka to certain geographic locations because of the ongoing conflict between LTTE and the military, which affected many regions in the east and north of the island until late 2010. In Nepal, field work was difficult to carry at the grassroots level because interference of local authorities and the ruling Maoist party, who often questioned the presence of TGH supported CVICT field workers in the selected communities. In Guatemala, the research conducted was limited to individual initiatives and research partnerships were generally short lived, given the political turbulence which seriously curtailed long-term field work activities.

In general, for all four countries, research outputs were rarely published in a peer review journals and most of the production was in the form of research reports, presentations and conference papers, and most of it is likely to remain part of the gray literature, and therefore of limited circulation. This mostly quantitative information is of relative value, since it does not allow an assessment of the research quality nor of their actual short or long-term impact in policies and interventions. The numbers of studies/interventions and outputs by each TGH country team is provided below (Table 4). A brief description of each study or pilot intervention by country has been included below and a more detailed description can be seen in each Country Report (see *Annex X TGH Country Reports*).

Table 4

Number of Studies/Intervention by TGH Country Team and Output type

	Number of studies/ interventions	Journal articles (published/ accepted)	Journal articles (submitted)	Conference Papers	Presentations (non-academic)	Book Chapters	Books	Reports	Theses
Guatemala	4	2	-	2	7	-	-	2	-
Nepal	5	-	1	2	2	-	-	9	-
Peru	12	-	1	4	2	-	-	6	-
Sri Lanka	9	3	-	16	78	13	3	-	-

Research outputs by country

Guatemala

During the period of 2007-2011, the *TGH Guatemala Team* completed the following studies and or interventions:

1) In collaboration with the Centro de Análisis Forense y Ciencias Aplicadas (CAFCA), a psychosocial intervention of forensic exhumations was conducted among the indigenous Maya (*Chuj*) communities of Huehuetenango. The psychosocial impact of exhumations of mass graves and the meaning of mourning and traumatic memories associated with this process were the main scope of this research project. Using qualitative methodologies and ethnographic methods (qualitative interviews, life histories, and focus group discussions) researchers were able to determine that the mourning process is incomplete until family members are able to find the bodies of their beloved ones and carry out burial rituals as prescribed and according to current Mayan traditions. This project highlighted the need for psychosocial support during the exhumation processes which are still taking place in Guatemala. A full report of this study submitted by Sarti, F., Anckermann, A., Anckermann, S., López, V. entitled “Efectos psicosociales de los procesos de exhumación entre los Maya Chuj: sobrevivientes de violencia política de Sebep en Huehuetenango, 2008-2009 can be found in (*GT Annex 6).*

2) In 2007, with the participation of the women's local NGO *Ajpu*, a research project was conducted on idioms of distress and healing practices among indigenous populations in Quiche. The main goal of this project was to assess the cultural variations in the expression of distress and the perceived effects of trauma exposure. Some of the main conclusions relate to the inability to understand the violence that erupted in their country and the violence against them exerted by the Guatemalan military. Finally, the community expressed that an effective collective coping mechanism is the reconstruction of their sense of community life and participation in local development initiatives. The results of this study were presented to the AJPU women's NGO between 2007-2009. Furthermore, a formal presentation was done to the AJPU in Chiché with representatives of the participating communities (attendance of 60 people).

In 2010 a poster presentation was posted at the World Mental Health Day 2010 in Guatemala City, and in November 2011 a poster presentation was conducted at the Conference of the Five Continents, *Psychosocial effects of Globalization on Mental Health: Toward an ecology of social links,* in the city of Lyon, France (*see GT Annex 4*). A popular education document is currently being revised for publication, based on a study conducted in collaboration with the Asociación para el Desarrollo Integral de Mujeres de Chiché- *AJPU* (López, P. *Experiencias y Reflexiones sobre Memoria Histórica y Problemas Actuales en el grupo de mujeres de Asociación para el Desarrollo Integral de Mujeres de Chiché- AJPU*. Guatemala: Popular Education Guide, in press). In addition, two manuscripts are under preparation: Lopez, P. & Quin, R., Memoria histórica y problemas actuales, Trabajando por nuestra Salud Mental; and Lopez, V., Lopez, P. & Quin, R. Expressions of suffering and coping experiences on Mayan descendants, exposed to political violence.

3) In 2008, Patricia Foxen, from the Women's Health Program/Toronto General Hospital carried out with support of the TGH Guatemala program a research project on gendered responses toward distress and resilience among indigenous men and women in the community of Tuluche, in El Chiché, Guatemala. Using qualitative methods, the researcher set to explore the meanings of the concept of "distress" and "resilience" among indigenous men and women, and their cultural and historical embeddedness. A research paper was later published: Foxen, P. (2010). Local narratives of distress and resilience: Lessons in psychosocial well-being among the

K'iche' Maya in postwar Guatemala. *The Journal of Latin American and Caribbean Anthropology*, 15(1), 66-89.

4) During 2009-2010 a mental health survey was conducted by the Health Sciences Research Center (CICS) at the University of San Carlos in collaboration with the TGH Guatemala country team, and other local partners. This was the first research of its kind carried out in Guatemala, and one of the first in the Central American region, consisting on the application of the Composite International Diagnostic Interview (CIDI) to a national random sample of respondents. The results of this survey were disseminated widely in Guatemala during 2010 and later published in: Lopez, V. Epidemiología de los Trastornos de Salud Mental en Guatemala, *Revista de la Asociación Guatemalteca de Psicólogos, Noviembre 2010*. An executive summary with the survey results may be found in: Lopez, V., Calgua, E., Garcia, C. Salud Mental en Guatemala (Resumen Ejecutivo de la Encuesta Nacional de Salud Mental), Documento para la Docencia, Facultad de Ciencias Médicas, USAC. Guatemala, Octubre, 2009. (*See GT Annex 2*). A report is being prepared and will be submitted for publication in 2012: Lopez, V., Kohn, R., Puac, V., Calgua, E. Lifetime prevalence of mental disorders in the Guatemalan population (unpublished manuscript).

Nepal

The *TGH Nepal Team* conducted the following studies/interventions:

1) TGH Nepal started the research program with a study aimed at assessing and mapping existing mental health resources in Nepal's four regions: the study was carried out in four major cities of Nepal, including the three selected rural districts of the TGH Nepal program. Altogether, 106 organizations/health centers were identified as working in psychosocial and mental health care in 20 districts, out of which, only 18 centers were run by the government of Nepal. The majority (70%) of the available resources are located in the central region, mostly centralized in the Kathmandu valley. A total of 73 psychiatrists, 50 physicians, 52 psychologists and 71 counselors were identified to be working in the field of psychosocial and mental health care. This study confirms the common assumption that in Nepal mental health services are rudimentary and scarce, and the few resources available are mostly concentrated in Kathmandu.

The services currently available are limited to a small number of urban settings. Very few government hospitals have psychiatric care facilities, indicating the need for scaling up and decentralizing psychosocial and mental care services. The study was completed in 2010 and the following outputs were prepared: (a) a research report produced by Sapkota, R.P., Gurung, D., Neupane, D. (2011). *Mapping of mental health resources in Nepal*. (See *NE Annex2*); (b) a presentation by Sharma, V.D (2009). Mental Health in Nepal (presented at the McGill-Nepal International Course, 2009). Presentation available at http://www.mcgill.ca/trauma-globalhealth/countries/nepal/; (c) a report by Subba, S., Sapkota, R.P., Manandhar, T.N., Shrestha, S.(2008). Integrating Psychosocial and Mental Health Care in Primary Health care System: Need assessment. Kathmandu; Centre for Victims of Torture, Nepal/Save the Children, Norway. PDF document available at http://www.mcgill.ca/trauma-globalhealth/countries/nepal/

2) During 2007-2008, the TGH Nepal team completed an assessment of the impact of the armed conflict on the psychosocial well-being of rural communities living in the three selected districts under study by the TGH Nepal program (Chitwan, Dang and Tanahu). The aims of the study were to identify prevalence rates of mental disorders, social and environmental factors associated with poor mental health, and resources being used in post conflict situation in Nepal. The cross-sectional study was conducted with 720 adults. A three-stage sampling technique was used following a proportionate stratified random sampling method. The outcome measures used in the study were Beck anxiety inventory (BAI), Beck depression inventory (BDI), PTSD—civilian version (PCL-C), function impairment scale, resources and coping. Standard scales such as BDI, BAI and PTSD were validated in Nepal. Of the sample, 27.5% met criteria for depression, 22.9% for anxiety, and 9.6% for PTSD. Prevalence rates were higher in women; and older age. Respondents who perceived and reported negative impact of the conflict in their communities were more at risk for depression, anxiety, and PTSD. The two main risk factors identified in the study were: belonging to marginalized castes (*Dalit*) and poverty (i.e., not having sufficient clothing, poor or no access to health services and having no radio at home). Overall, the prevalence rates of depression and anxiety are high compared to epidemiological studies in western settings; the findings underscore the need for health care planners to address the current lack of mental health care resources in post-conflict rural Nepal. Two research reports

are available: (a) Luitel, N.P., and Sapkota, R.P. (2009). “Conflict and mental health: Cross sectional epidemiological study in Nepal.” (See *NE Annex 1*); and (b) a publication by Luitel, N.P., Jordans, M.J.D., Sapkota, R.P., Tol, W.A., Kohrt, B.A., Thapa, S.B., Komproe, I.H., Sharma, B. Conflict and mental health: a crossectional epidemiological study in Nepal. *Social Psychiatry and Psychiatric Epidemiology: DOI 10.1007/s00127-012-0539-0.*

3) The third study conducted by the TGH Nepal Team was a process evaluation of the Community Mental Health Promotion (CMHP) program. The CMHP was a program already in existence in CVICT, prior to the initiation of the TGH program. Using a qualitative methodology the evaluation was conducted in 2008/2009 by CVICT and TPO Nepal in two rural districts: Chitwan and Dang. The evaluation included the design and development of CMHP by focusing on training, monitoring of the training and implementation process, and assessment of the program by beneficiaries and community stakeholders. The study revealed that survey participants were generally in favour of CMHP and held strong beliefs that psychosocial and mental health problems resulted from the misdeeds committed in a previous life (Hindu belief in rebirth); and reported a positive impact of the program on their daily activities, behaviour and relationships. The study results were later presented in different knowledge transfer workshops and have been incorporated in the book “Community mental health promotion”. (*See NE Annex 3* for detailed report). Transcultural Psychosocial Organization (TPO-Nepal) & CVICT Nepal drafted a report *Draft report on Process Evaluation of Community Mental Health Promotion Program* in 2008. PDF document available at http://www.mcgill.ca/trauma-globalhealth/countries/nepal/ and The School of Applied Human Sciences (SAHAS), CVICT and TPO produce a report, *Post Graduate Diploma in Psychosocial Interventions (PGDPSI).* PDF document available at http://www.mcgill.ca/trauma-globalhealth/countries/nepal/ .

4) In 2009-2010, a situational analysis of psychosocial counseling in Nepal was conducted at CVICT. Psychosocial counselling consists of a 4 to 6 months training curriculum offered by national and community-based organisations working in the field of psychosocial and mental health care. The curriculum was in use for several years without being properly evaluated or adapted. The study aimed to (a) analyze the current situation of psychosocial counseling in Nepal; (b) assess the challenges and needs of counselors to make their work more useful, better

adapted to local needs; and improve the quality of the training; and (c) comprehend how various stakeholders can understand the different concepts used in psychosocial and mental health care. Currently, the research report is being worked on as a manuscript for publication by Dristy Gurung and Ram P. Sapkota. (For a full report *see NE Annex 4).*

5) The effectiveness study of the CMHP program and psychosocial counselling were initiated in 2009. The objectives of the study were to (1) assess the impact of the CMHP program on psychosocial and mental health problems; (2) assess the effectiveness of psychosocial counselling by recording the decrease of the burden of mental illness (decrease in number and/or severity of illness and psychosocial problems); (3) document how counselling is practiced in communities and the variation in the implementation of the program by the different counsellors; and (4) examine the cultural relevance and acceptability of the intervention in the communities (multi-level perspectives of client, counsellor, clients' family members, and other stakeholders who are related to the program). The population under the study were people from the districts of Dang, Tanahu and Chitwan, showing a high prevalence of depression and anxiety in a previous study carried out in 2007/2008. The study shows that CMHP program is effective in reducing the average score and prevalence of anxiety and depression among those who are suffering with depression and anxiety, except males and people having irregular access to medication. A report of this study is being prepared for publication by Ram P. Sapkota, Dristy Gurung, Deepa Neupane and Santosh Shah. Reports and presentations currently available are: Shah, S., Sapkota, R.P. Gurung, D. (2010). Effectiveness study of CMHP and Counselling in Nepal. Research report (See *NE Annex 5*); Santosh Shah, Ram Prasad Sapkota &Dristy Gurung, 2010). CMHP implementation process-Nepali. Presented preliminary finding to the Communities during the 15 CMHP program. PPT in Nepali available at: http://www.mcgill.ca/trauma-globalhealth/countries/nepal/; Sapkota, R. P. (2009). Experience of Mental and Psychosocial Health Practices. PPT available at: http://www.mcgill.ca/trauma-globalhealth/countries/nepal/; Sapkota, R.P., Danvers, K., Tol, W.A. & Jordans, M.J.D. (Eds.) (2007). Psychosocial counselling for people affected by armed conflict in Nepal: A trainer's manual. Kathmandu; - Sahara Paramarsha Kendra/USAID. PDF document available at http://www.mcgill.ca/trauma-globalhealth/countries/nepal/

Peru

The *TGH Peru Team* carried out the following studies/interventions:

1) Case study of community-based interventions for the strengthening of social networks in Lucanas and Santiago de Vado, Ayacucho, conducted in 2009. The aim of this case study was to evaluate a community-based intervention aimed at strengthening social networks in the Andean communities of Lucanas and Santiago de Vado in Ayacucho. The intervention being assessed targeted interpersonal and inter-group relations, promoting and disseminating communications, and the construction of collective and local identity. It focused on the reconstruction of historic memory and competences in conflict resolution for the development of municipal planning and administration. Group discussions between adult and youth groups, dramatizations, and photo exhibitions were implemented. The evaluation's aims were: 1) To assess the community's level of empowerment after the intervention, 2) to evaluate which collaborations and social processes that facilitated or undermined community support networks. Fifteen qualitative interviews were carried out with key-informants, such as community leaders, leaders of women's organizations and youth organizations, religious leaders, the mayor and other local government authorities, and program intervention participants, as well as a total of five focus group discussions with participants of the intervention in both communities. The findings of the study showed that the intervention was not implemented as planned mainly due to a shortage of funding. However, according to the participants, community identity was strengthened as a result of the intervention, especially among young people, who reported that they had the opportunity to learn about their people and recent history of violence. Also, the intervention demonstrated usefulness in creating a space for dialogue between leaders and community members for future planning purposes, as well as for communication about the painful past lived by the community members during the armed conflict. A research report was produced by Miguel Ramos and Maria Mendoza in 2008, entitled: *Evaluación del Proyecto Fortaleciendo las Redes Sociales de las Comunidades Campesinas de Lucanas y Santiago de Vado. (See PE Annex 14)*. A poster presentation by M. Ramos and M. Mendoza of this study was posted at the Universidad Peruana Cayetano Heredia Biannual Conference, in Lima, 2009.

2) Resilience and political violence in schools in two Andean contexts conducted in 2009. The aim of this study was to explore the characteristics that foster resilience in students, parents and teachers in two Andean urban districts in order to develop an intervention to promote resilience in populations affected by political violence. The study was cross-sectional and employed both qualitative and quantitative methods. It included two secondary schools in Ayacucho and two secondary schools in Cusco, representing students of 3rd, 4th, and 5th grades, as well as their teachers, and parents, selected by a convenience sample. The data collection was done using semi-structured interviews and focus group discussions. The study results underline the importance of social support networks for personal development and resilience, as indicated by all of the interviewed groups. The most significant support comes from spiritual or religious groups, especially in Cusco. Cusco's teachers confront problems with hope more frequently than Ayacucho's teachers, and they respond less violently to interpersonal problems than Ayacucho's teachers do. Students from Cusco are more likely to reject physical and psychological violence than students from Ayacucho. A considerable number of students in both cities report that they do not have a teacher that they consider a confidant. The results of this study are available as a report produced by Darcy Calderon (2009). *Research Report: Resiliencia frente a la violencia política en instituciones educativas de dos ciudades andinas*. Lima. (See *PE Annex 16*). Additional documents consist of a presentation of results to stakeholders of the Regional Offices of Health and Education, and involved schools, in Cusco (December, 2010) and a poster presentation by Calderón, D. *Resiliencia Frente a la Violencia Política en Instituciones Educativas de Dos Ciudades Andinas*. Poster presented at the Cayetano Heredia Biannual Conference 2009. Lima, UPCH.

3) An evaluation of the distance course "Mental health in populations: Promotion and prevention" from the perspective of the students (CSMP) was conducted in 2009 among graduate students enrolled at UPCH during 2004 and 2005. This was one of the first distance courses in Peru, leading the way in the Latin American region. Its objective was to introduce health professionals to collective mental health issues from psychosocial and interdisciplinary perspectives, as well as equity, human rights, and mental health promotion and prevention approaches. The study sample consisted of 41 participants who completed the course during

2004 and 2005. Quantitative and qualitative methodology was used. Participants were contacted via e-mail, telephone or social network services in order to request the completion of an anonymous online questionnaire. Also, former students residing in Lima were invited to take part in a focus group discussion, whereas participants residing in other regions were invited to participate in in-depth interviews via telephone. The data collection process was complemented by revising electronic files documenting students' activities, which allowed a comparison between students' expectations at the time of his or her enrollment and the quantity and quality of his or her interaction with tutors and student fellows. For a full report of the study see (*PE Annex 18* and *PE Annex 19: letter of IRB approval).*

4) In 2010, Irene Hofmeijer, student at McGill University and recipient of a TGH McGill small award carried out a study called Psychological Well-being and the Environment, as part of her BSc thesis. The aim of this study was to explore how psychological wellbeing may be influenced by place of residence and environmental factors in two areas of a low-income neighborhood in the district of Independencia, in northern Lima, Peru. The specific objectives of the study were: 1) to explore how mental health and psychological wellbeing are influenced by place of residence (comparing high vs. low elevation areas) within the district of Independencia; and 2) to validate the use of research instruments (General Health Questionnaire – 12 (GHQ-12), Montgomery survey questionnaire on living standards, and McGill Narrative Interview (MINI), in a sample of urban poor women (18 - 64 years), from a cultural perspective. This was a qualitative study based on semi-structured interviews, and a total of 80 women between the ages of 18 and 65 participated in the study. The results show that the social environment play a greater role than the physical environment, access to services, or other population characteristics, in determining mental health outcomes. To read the full report, please see (*PE Annex 20: report;* and *PE Annex 21: letter of IRB approval*).

5) Political violence, life trajectories and long-term sequelae: a follow-up study of PTSD cases in selected communities of Huanta, Ayacucho. The initial study (first wave) conducted by D. Pedersen, J. Gamarra and C. Errazuriz in 2001, identified a total number of 92 PTSD cases (prevalence rate: 25%) out of 323 adults interviewed. The new study (second wave), was conducted by the same team in 2010-2011, followed-up the 92 respondents who were identified

as having symptoms compatible with PTSD in 2001. Out of the total 92 participants, 10 died from various causes during the ten year interval, and 80 out of 82 survivors were tracked back, contacted, and later interviewed. The response rate was high (98%) and 55% of the participants scored still positive for PTSD, after being diagnosed as PTSD positive cases ten years before. This is a first study of its kind in Peru (and possibly in Latin America), as it follows-up longitudinally a sample of individuals with PTSD, and will provide valuable information with regards to the natural history of PTSD and persistence of trauma-related symptoms overtime. It will also allow comparing narratives of traumatic memories over time and verify the changes occurred in the consolidation and reconsolidation process of traumatic memories. A scientific publication is being prepared by the authors. For further information regarding the study see report (*PE Annex 22: report;* and *PE Annex 23: IRB letter of approval*).

6) Traumatic memory and sexual violence among Quechua women in the Peruvian Andes. In the sierra region of Peru, Ayacucho was hit especially hard during the internal armed conflict after two decades of political violence (1980-2000). Several studies have been carried out to understand the gender differentials and consequences of exposure to violence and to identify the health care needs of the affected population in Ayacucho. However, there is hardly any information pertaining to sexual violence and its health and mental health consequences. The non-disclosure of the events and poor visibility because of stigma associated with rape, has led to discrimination and marginalisation of the affected women, and underestimation of its health impact and psychological *sequelae.* No interventions to promote healing and recovery among victims of sexual violence were conducted and women remained ostracised and largely ignored by their families and local communities. The purpose of this study was to contribute to the reconstruction of collective memory regarding sexual violence against Quechua women during the internal armed conflict from 1980 to 2000, in the district of Morocuchos, Ayacucho. The study used a participatory approach by in-depth interviews of key informants (six women that were exposed to multiple and successive episodes of rape by soldiers), testimonies and illustration of the traumatic events, and focus groups discussions to validate the questions of the interview. Some important results emerged from this study: a) during the study, strong linkages and social bonding were established among women affected by sexual violence, which helped

break the silence and later facilitated the testimonials of women; b) the dynamics of coping with such incidents and the stigma within the community has not contributed to easing the burden of these women and could even be blamed for preventing women from coping and recovering; c) a protected group setting is effective for breaking the voluntary silence; d) even more than a decade after the end of the armed conflict, memories about what occurred still have great influence on the daily life of victims. For further information see the report (*PE Annex 24: report (part I/part II); and PE Annex 25: IRB letter of approval*).

7) Validation of the Alcohol Use Disorders Identification Test (AUDIT). This study was carried out in 2011 by F. Fiestas and J. Vega. The aim of the study was to assess the reliability and validity of the AUDIT among males, in health care facilities in Lima. Women were not included in the study due to low reporting of alcohol use among women, which would have increases the costs associated with recruiting the required sample size. Criterion validity was established by applying the AUDIT and the Composite International Diagnostic Interview on Substance Use Disorders (CIDI-SUD). The reliability of the AUDIT was assessed using Cronbach's alpha. Patients obtaining 20 or more points on the AUDIT (which indicates a probability of approximately 95% of alcohol dependence) were invited to attend a more extensive interview using the CIDI-SUD within the next seven days. For more detailed information, see report (*PE Annex 26: report;* and *PE Annex 27:letter of IRB approval UPCH; PE Annex 28: letter of IRB approval, Universidad Nacional San Cristobal de Huamanga*).

8) Development of a post-disaster mental health intervention. In 2007, under the request of the Peruvian Ministry of Health and in response to the 2007 earthquake, the TGH Peru Team participated in a planning and advisory committee composed by the Ministry of Health – Lima (National Office of Mental Health) and the Ica Regional Mental Health Office, in collaboration with the Pan American Health Organization (PAHO), the Mental Health Section of the Human Rights National Coordinator, and the NGO Paz y Esperanza. This committee was in charge of advising the MOH officials in planning, training, and services delivery of recovery and rehabilitation operations aimed at the population affected by the earthquake. A series of activities were implemented to strengthen capacities and develop networks among different actors. Participants included international experts in trauma and disasters management, including

Raquel Cohen (University of Miami, United States) and Duncan Pedersen (Douglas Institute - McGill University), both from the Trauma and Global Health Program, Canada, Carlos Beristain, (Universidad Complutense, Spain), and national experts, such as Viviana Valz Gen (Human Rights National Coordinator) and Celso Bambarem (Pan American Health Organization and Universidad Peruana Cayetano Heredia). Several workshops were organized targeting health professionals of the affected area, as well as health workers and educators working in the education sector, the police, NGOs, humanitarian and religious organizations, and universities of the most affected regions (Ica, Pisco and Nazca). List of course materials available at: http://www.mcgill.ca/trauma-globalhealth/resource-center/regional/

9) In 2009-2010, Darcy Calderon, a member of the TGH Peru Team, carried out an intervention on resilience and domestic violence in urban and rural schools of Cusco. This intervention was carried out in 2010, based on the research results of the previous study on resilience and political violence in secondary schools in Ayacucho and Cusco, conducted the previous year. The intervention aimed to improve the participants' interpersonal conflict-solving skills; improve self-esteem; and their ability to handle emotions and interpersonal problems. In addition, it aimed to strengthen the social support networks of teachers, parents, mothers, and students. The intervention involved the following activities: brief formative assessment, adaptation of training sessions, workshops, follow-up of participants, and advocacy activities with the Regional Offices of Health and Education and the City Hall of Wanchaq, Cusco. The intervention was evaluated, using qualitative methods, such as in-depth interviews and focus group discussions composed of separate groups of students, teachers and parents. The evaluation showed that the intervention succeeded in motivating participants to reflect on their own lives, prompting them to make effective behavioral changes. Reflections lead to improved emotion management, in particular, through learning how to channel psycho-emotional problems.

A research report was produced by D. Calderon in 2011: *Resiliencia y violencia familiar en comunidades educativas de instituciones educativas andinas – Cuzco*. Lima, Peru. (*See PE Annex 29 in Country Annexes).* A poster was later presented at the Bi- Annual conference held at UPCH, in 2009. Presentation of the results of study to stakeholders from the Regional Offices of Health and Education and participating schools in Cusco was done in December 2010.

10) Brief interventions for reduction of alcohol consumption. The TGH Peru Team, in collaboration with the Honorio Delgado-Hideyo Noguchi National Institute of Mental Health (NIMH), developed a proposal for implementation of an evidence-based and culturally sensitive brief intervention protocol aimed at treatment of alcohol and other drug dependences. Fernando Luna, a young psychiatrist who works in the Addictions' Division at the NIHM, was awarded a 3-month TGH fellowship and trained at the Foster Pavillion (an affiliate of the Douglas Institute), in Montreal, Canada. At the time of preparation of this final report, the brief intervention protocol has not been carried out due to the lack of support from the authorities at the NIMH. However, we are hopeful that it will materialize sometime soon.

11) Development and implementation of a special initiative called *Observatorio de Violencia* (Observatory on Violence). Given the context of growing and steadily increasing levels of inter-personal violence in Peru, including suicides and homicides, domestic violence and violence against women, as well as deaths from traffic accidents, the TGH Peru program, implemented a series of activities led by A. Gushiken, aimed at developing an "Observatory of Violence" -- an information system for monitoring, reporting, and secondary prevention of violence and its consequences-- involving the Ministry of Interior, the Attorney General's Office, the National Police, the Ministry of Health, and the City Hall of Lima. As a result, the TGH program and the City Hall of Lima have developed a collaborative program to contribute to establish an information system for increasing security and safety in Metropolitan Lima.

The first step was to conduct a diagnosis or baseline of the current situation, reviewing existing studies on the topic of violence, visiting relevant institutions (National Police, Attorney General's Office, Legal Medicine Institute, Ministry of Health, Ministry of Women and Social Development) and conducting interviews with key representatives of these institutions. Published documents were reviewed (Annual Statistics of the National Police, Crime Observatory Bulletin of the Attorney General's Office, Epidemiological Bulletin of the Ministry of Health and others). A paper derived from this initiative is under review: Fiestas, F., Rojas, R., Gushiken, A, Gozzer, E. (2012) ¿Quién es la víctima y quién el agresor en la violencia de pareja en el Perú? Estudio epidemiológico en 7 ciudades. *Revista Peruana de Medicina Experimental y Salud Pública*. For a full report (see *PE Annex 33: Diagnosis of Information Systems on*

Violence in Peru; and PE Annex 32: Observatory on citizen safety in Metropolitan Lima). The next step consisted of requesting letters of intent from the Municipality of Lima and signing a letter of collaboration between UPCH and the Ministry of the Interior; including conducting two 2-day workshops on capturing, processing and analyzing data on violence. A total of 49 representatives of governmental institutions responsible for the collection of data on violence in the North and South of Peru participated. This was followed by a workshop on secondary data analysis; and an oral presentation of four posters prepared by inter-sectoral and interdisciplinary groups of students who attended to the secondary data analysis workshop in the 2011 Biannual Research Conference of UPCH; Finally, the TGH program supported the development of software and the respective manuals, as well as training to facilitate the use of generated data and the implementation of a standardized information system on violence, providing national and departmental data on violence updated in real time. The continuation of this valuable initiative will depend on subsequent complementary funding. Currently, the TGH Peru program has requested financial support from the United Nations Development Program (UNDP), among other donors, which is yet to be confirmed in 2012.

Sri Lanka

During the reporting period (2007-2011), the *TGH Sri Lanka Team* has been successful in completing six major research initiatives which are summarised as follows:

1) The first and most extensive research program was the TGH Sri Lanka study of 'Mental health and wellbeing of communities affected by conflict and natural disaster' which included four different regions in the country, namely Hambantota (southern), Puttalam (north-western), Batticaloa (east) and Jaffna (north). The members of eight communities affected by conflict and natural disaster were consulted in order to participate in the mental health study and related issues in those communities; what their aspirations regarding wellbeing were; and what interventions were necessary to improve the wellbeing of such affected communities. Groups of men, women, youth and children (ranging from 10-15 in each group) from the selected communities were consulted separately. Focus group discussions, methods and tools derived and adapted from participatory rural appraisal (PRA) and key informant interviews were used to

elicit information. The key findings of the four regional studies equally pointed to the inseparable nature of the economic, social and psychological dimensions of wellbeing which are interwoven together to form a comprehensive view of community wellbeing. People use numerous strategies both at individual and community level such as conducting religious and spiritual activities, cutting down domestic expenses, staying together in community groups or in secure places etc., to increase their coping mechanisms and protect themselves from external threats. Interventions by external aid agencies have been significant in the recovery process of the affected communities, but the trust and confidence that people placed in those agencies varied with the duration of their interventions, type of assistance provided, and the ways in which the aid was distributed. The main outputs of this research program are reported online, in presentations and/or in publications funded by the TGH program in collaboration with other agencies as follows:

(a) Weerackody, C., & Fernando, S. (2009*). Mental health and wellbeing-experience of communities affected by conflict and 2004 Tsunami in Sri Lanka.* Colombo: PRDA and OXFAM America. (See Annex VIII: TGH IDRC Template 1).

(b) Weerackody, C., & Fernando, S. (2009). *Wellbeing of communities affected by conflict and tsunami: Underlying factors and implications for policy and development practice*. Paper presented at the Wellbeing and Development Conference, University of Colombo (SPARC).

(c) Weerackody, C. (2008). *Introduction to Teasdale-Corti Programme: "Teasdale-Corti Programme, Research and Capacity Building – Guatemala, Nepal, Peru and Sri Lanka*. Presentation at the PSF Monthly Meeting, Colombo, Sri Lanka.

(d) Weerackody, C. & Fernando, S. (2011) *Reflections on Mental Health and Wellbeing: Learning from Communities Affected by Conflict, Dislocation and Natural Disaster in Sri Lanka*, Colombo: PRDA. (See *Annex VIII*: *TGH IDRC Template 7*).

(e) Ganesan, M. (2009). *Responding to community needs: Experiences in Batticaloa*. Presentation at the Mental Health Training Workshop, National Institute of Mental Health, Angoda.

(f) Galappatti, A. (2009). *Key satisfaction concerns of mental health service users in the Batticaloa district.* Presentation at the Mental Health Training Workshop, National Institute of Mental Health, Angoda.

(g) Fernando, S., &Weerackody, C. (2009). Challenges in developing community mental health services in Sri Lanka. *Journal of Health Management*, 11(1), 195-208.

(h) Fernando, S. (2011). Background to mental health in Sri Lanka in S. Fernando, S. & C. Weerackody (eds.) *Aspects of Mental Health in Sri Lanka*, Colombo: PRDA. (See *Annex VIII: IDRC Template 6*).

2) A second study was conducted in two tsunami affected communities in the southern provinces of Sri Lanka in 2008. The topic was on community perceptions on mental illnesses and mental health; understanding how communities affected by disaster perceive and define mental illness and mental health, and which institutions are approached by communities in search of redress for their mental health problems were the main objectives of this study. Focus group discussions (FGDs) were conducted with separate groups of men, women, youth and children (each group having 10-15 members). The research pointed to how a variety of terms drawn from different languages, Singhala, Tamil, including English and Portuguese, were used by the communities to characterize persons with mental health problems. Social stigma attached to persons with mental illnesses, and their families varied with social status, power relations and behaviour patterns demonstrated by the mentally ill persons. People would approach diverse institutions either simultaneously or one after the other to seek help for their family members to recover from their illnesses. These institutions include religious and spiritual healers, indigenous medical practitioners and western psychiatrists. The results of this study have been shared with various professionals at different capacity building training workshops and also been published in websites and recent TGH reports and publications produced by PRDA:

(a) Weerackody, C. (2009). *'Perceptions of wellbeing in refugee communities in North-Western Sri Lanka – A preliminary study'- Results of the study of wellbeing conducted with the Muslim refugees in the Puttalam district*. Presentation at the PSF Monthly Meeting, Colombo, Sri Lanka.

(b) Weerackody, C. (2008). *'Mental health and wellbeing of communities affected by conflict and tsunami in Sri Lanka'. Results of the study on wellbeing conducted with the Muslim refugees in the Puttalam district and the tsunami affected communities in the Hambantota district*. Presentation at a Public lecture, Colombo, Sri Lanka. (The lecture was organized by PRDA; Participants: 40). PPT available at: https://secureweb.mcgill.ca/trauma-globalhealth/sites/mcgill.ca.trauma-globalhealth/files/WeerackodyMentalhealthandwellbeingOxfampresentation.pdf

(c) Weerackody, C. (2008). *'Mental health and wellbeing of communities affected by conflict and tsunami in Sri Lanka'. Results of the study on wellbeing conducted with the Muslim refugees in the Puttalam district and the tsunami affected communities in the Hambantota district*. Presentation to the partners of Oxfam America, Colombo, Sri Lanka.

(d) Weerackody, C., & Fernando, S. (2009). *Mental health and wellbeing-experience of communities affected by conflict and 2004 Tsunami in Sri Lanka*. Colombo: PRDA and OXFAM America. (*See Annex VIII: TGH IDRC Template 1*).

(e) Weerackody, C., & Fernando, S. (2008). Field report: Perceptions of social stratification and well-being in refugee communities in north-western Sri Lanka. *International Journal of Migration, Health & Social Care*, 4(2), 47-56.

(f) Stevens, E. (2008). *With goods replaced, tsunami survivors search for well-being*. (http://www.oxfamamerica.org/articles/with-goods-replaced-tsunami-survivors-search-for-well-being/?searchterm=with%20goods%20replaced)

(g) McCabe, C. (2008). *One researcher's method: Ask the people who know best*. From http://www.oxfamamerica.org/articles/one-researchers-method-asks-the-people-who-know-best/

(h) Stevens, E. (2009). *The house that drives you crazy: Mental health and well-being at times of disaster.* From http://www.alertnet.org/db/blogs/57699/2009/03/6-10 2615-1.htm

3) A qualitative study of the experience of former patients from the National Institute of Mental Health (formerly Angoda Hospital) was done in 2009. Twenty-four patients/service users of the NIMH and living in the Colombo district were included in the study with the aim collecting their experience in the hospital and particularly the interaction they have had with hospital staff. Former patients (middle and low-income groups) perceived their admissions to

mental hospital as involuntary and induced by family members without the patient's consent. They complained of hospital authorities not listening to their side of the story at the time of admission and also being stigmatised and discriminated against because of their illness. Meanwhile patients from the poor socio-economic groups had no other alternative except seeking treatment from a mental hospital as it provided expensive drugs free of charge which they cannot afford to buy from outside sources. The minor staff in the hospital, such as attendants, played a dominant role in determining the daily routine of the patients and the type of care they received. Two main presentations to mental health professionals, including psychiatric nurses were done from this study by Rashita Perera, entitled *Feedback from former patients of the National Institute of Mental Health (Angoda Hospital).* Both conferences were organized by the TGH Sri Lanka Team in collaboration with Barnet, Enfield and Haringey (BEH) Mental Health Trust, UK and the National Institute of Mental Health, Angoda. (see website https://secureweb.mcgill.ca/trauma-globalhealth/sites/mcgill.ca.trauma-globalhealth/files/PereraFeedbackfromexpatientsoftheNIMH.pdf.

4) A study on the diagnosis and treatment approaches and practices of Ayurveda and indigenous medicine to mental health and treatment of mentally ill persons' was conducted based on a literature review and personal interviews with an indigenous healer (Sinhala Vedamahattaya), two Ayurvedic, and one Siddha healer. The main purpose of this study was to learn about the approaches (adopted by practitioners of these systems) to mental health and mental illnesses in general and their treatment practices for mental illnesses in particular. Several commonalities were observed in the explanations given by the three different physicians with regard to the diagnosis of the root causes of mental illnesses, which basically pointed to imbalances in three main compartments (*tridoshas*) of the total human being. These imbalances are considered by indigenous practitioners to be caused by a range of internal and external factors including environmental influences and supernatural forces. The study also identified how three different traditions of indigenous medicine (Ayurveda, Siddha and Sinhala Medicine) classify mental illnesses and their approaches for treatment of different forms of these illnesses. The results of this study have now been published in Perera, R. (2011). How indigenous medical

practitioners deal with mental illness in S. Fernando & C. Weerackody (eds.) *Aspects of Mental Health in Sri Lanka, Colombo*: PRDA (*See Annex VIII: TGH IDRC Template 6*).

5) Another TGH supported study was conducted aimed at developing a 'toolkit' for psychosocial interventions in consultation with local NGOs and community workers which eventually resulted in collating a set of guidelines for community-based practitioners working in psychosocial interventions. The toolkit would provide a set of useful guidelines that may help service providers in particular to better understand mental health and its various dimensions, as well as create awareness to the multiplicity and the complexity of community settings, including their power relations, bondages, and their needs and aspirations. Furthermore, the guidelines would advocate participatory approaches and methodologies as instruments of engaging communities in dialogue and consultation for identification of needs, prioritization, planning of interventions and evaluation. Although it was planned to mobilize a few NGOs to pilot these guidelines in their current field operations and further test their applicability and relevance, it failed to reach the stated goals primarily because of the reluctance on the part of these NGOs to change their own program, accommodate their pre-planned activities, and other institutional constraints. A paper was presented by Wettasinghe, K. (2009). *Mental health - Psychosocial Wellbeing Process Toolkit for Community Based Interventions: Guidelines for psychosocial interventions at community level,* at the Mental Health Training Workshop, National Institute of Mental Health, in Angoda, Colombo, Sri Lanka.

6) Three small research and action projects for community mental health promotion were piloted in a tsunami affected community (*Mirissa*) in the southern district of Matara. The projects were convergent to learn how communities could be empowered to effectively engage in designing, planning, implementing and monitoring community-based projects and how such projects could be made cost effective and sustainable. The three projects consisted in the construction of a shrine room and Buddha statue, a bus halt with a shelter, and a flower altar. The leadership in these community-based projects was exclusively taken up by three women's organizations in Mirissa who in turn mobilized support from their counterpart male members. The results of these research and action projects have now been published in Weerackody, C. (2010). Enhancing Community Wellbeing and Mental Health: Action Projects in Tsunami

Affected Villages in Sri Lanka in Fernando, S. &Weerackody, C. (2011). *Aspects of Mental Health in Sri Lanka, Colombo: PRDA* (*See Annex VIII: IDRC Template 6*).

With the aim of informing our donors and other TGH partners, the mental health professions and the public at large of the research being carried out by the TGH program, the TGH Sri Lanka Team made available all the reports and/or presentations and publications on the TGH website classified by country (see http://www.mcgill.ca/trauma-globalhealth).

For a detailed description of all the studies and/or interventions summarize above by country, year, target population and output, including title of the report/presentation or publication (see *Annex V: TGH Research reporting: written reports and oral presentations).*

Capacity building (CB)

The capacity building (CB) component of the TGH program was centered on enhancing the professional competences and upgrading research skills of McGill students and LMIC TGH country teams and their boundary partners, in order to conduct a collaborative research and action program of advanced studies, continuing education, and knowledge transfer in the social and cultural dimensions of mental health.

This was achieved with the collaboration of McGill-Douglas Institute staff and its affiliated centers, such as the Culture and Mental Health Research Unit, Jewish General Hospital; the Department of Social Studies in Medicine, and the Division of Social and Transcultural Psychiatry, among others.

The TGH capacity building program reached a fairly large number of individuals. At the end of the project cycle, an accumulated total of 3475, graduate students and faculty members, including health-related professionals and a variety of community health workers participated in training and other CB activities (Table 5). Courses, seminars and workshops were conducted by McGill-Douglas faculty, or by local TGH country teams and its partners. In addition, fellowships, scholarships and small grants were awarded on a competitive basis throughout the life time of the project.

Table 5
Total Number of Trainees by TGH Country Team and by Year

Country	2007	2008	2009	2010	2011	Total Number of Trainees N=3475
McGill-Douglas	122	257	321	135	56	892
Guatemala	-	308	178	266	170	922
Nepal	8	9	14	14	-	45
Peru	280	-	318	221	77	896
Sri Lanka	-	-	299	316	105	720
Total	410	574	1130	952	408	3475

Capacity building organized by TGH McGill-Douglas team was directed to the wider TGH network of co-applicants, collaborators, and students from Canada, and fellows from TGH country teams and partner institutions, who participated in the annual McGill Summer Program in Social and Cultural Psychiatry, which includes graduate level seminars and workshops on Cultural Psychiatry, Trauma and Recovery, and Psychiatric Epidemiology, Use of Quantitativeand Qualitative methods in cross-cultural research, and Community-based Participatory Action Research, as well as in the McGill Advanced Institute in Cultural Psychiatry, on themes related to ongoing McGill-Douglas faculty initiatives. A workshop on Rethinking Trauma: Social, Cultural and Psychological Perspectives" was initiated by the TGH McGill team in 2007 and offered throughout the 5 years of the TGH program, capturing a total of 118 national and international students and professionals. It has become since part of the curriculum of the Summer Program http://www.mcgill.ca/tcpsych/training/summer/ and it will continue beyond the TGH project cycle for at least one additional year (2012).

In May 2009, due to increasing interest on issues of global mental health research, a new course was offered by the TGH McGill-Douglas team in collaboration with the 16th Annual summer Program in Social and Cultural Psychiatry, the "Global Mental Health Research Seminar", aimed at both an international and national audiences. This course was offered once again in 2010, 2011, and will be offered in 2012 and beyond. A total of 117 participants have so far attended the course.

The TGH fellowship program was intended for LMIC selected candidates to participate in the activities of the TGH McGill-Douglas program during the Annual Summer Program in Social and Transcultural Psychiatry, as well as those special programs tailored for TGH country teams and their partners (e.g., brief interventions for alcohol abuse at Foster Pavillion; cultural formulation and strategies for working with culture-brokers at the Culture and Mental Health Research Unit (CMHRU) of the Sir Mortimer B. Davis Hospital). Throughout these activities, trainees have received mentorship for their research projects integrated within the larger research program of TGH country teams. Trainee's recruitment was undertaken by the TGH Country Teams and their boundary partners' institutions and the final selection was made with the assistance of McGill-Douglas Institute Executive Cttee. The fellowship program has been extremely successful and the interest in applying to the TGH Fellowship program and participation in the McGill Summer course in Social and Cultural Psychiatry increased considerably throughout the life time of the project. The project had originally budgeted for 12 fellowships; but at the end of the project cycle we had hosted a total of 19 fellows, two of them attended courses and workshops twice. The additional fellowships were made available due to extra funds transferred from the balance of funds from previous years.

Table 6

Fellowships and Small Awards Program

	2007	2008	2009	2010	2011	Total
McGill small awards program	1	-	3	4		8
Fellowships program:						
Guatemala	-	-	-	-	-	-
Nepal	-	1	2	1	-	4
Peru	-	-	-	5	2	7
Sri Lanka	2	2	-	6	-	10

Nepal, Peru and Sri Lanka did not experienced problems recruiting candidates with English as a second language. Guatemala however, was unable to use the fellowship program, mostly due to the lack of candidates with the required English language proficiency level.

Nepal was able to use 4 fellowships of 1 month and 1 fellowship of 3 months (3 males, one female). R.P. Sapkota who used the three month fellowship has now been accepted to the

PhD program in Psychiatry at McGill University. Ganga Awal, the only female fellow was later promoted to Executive Director of CVICT, and Anup Poudel was promoted to project coordinator and psychosocial trainer at CVICT, but opted to work in a different NGO (TPO Nepal).

We hosted a total of 7 fellows from *Peru*, during the years 2010 and 2011 (2 males and 5 females). Most of the fellows came from UPCH, except one from the Pontificia Universidad Catolica del Peru (PUCP), one from Peruvian National Institute of Health, and one from the staff of the Council of Ministers Presidency. All of them however were enrolled members of the Peru TGH country team. Two fellows came for one month and the other five attended a workshop at the McGill Summer Program. Dr. Fernando Luna's fellowship focussed on the design of a brief intervention protocol for alcohol use and misuse to be implemented at the Peruvian National Institute of Mental Health, in Lima.

For TGH *Sri Lanka*, recruitment of fellows was facilitated since a large proportion of health professionals speak English as well as PRDA's solid and lasting partner institutions from where the majority of the fellows came from (i.e., the National Institute of Mental Health , in Angoda; the Department of Philosophy and Psychology, University of Peradeniya; the Teaching Hospital at Jaffna, etc.). A total of 10 fellowships were awarded, nine funded by the TGH program and one with funding of his own, came from Sri Lanka (3 women and 7 men) (Table 6).

The TGH Small Grant Award program (SGA) was reserved for McGill students and junior researchers and was awarded on a competitive basis to pursue research in the area of Trauma and Mental Health in LMIC countries (3-4 month duration) and provided support to ongoing field research under the supervision of a southern Co-PI. A total of 8 McGill-based candidates received a small grant award, three of which during year 4. A follow-up on the fellows and award recipients was carried out to obtain information on their post-fellowship career development.

SGAs were given to the following recipients: Chantal Robillard, post-doctoral student, to conduct collaborative work with Medicos Descalzos in El Quiche, Guatemala; Paula Godoy-Pais, PhD candidate, to support her data collection on resilience among indigenous women in

Guatemala; Hanna Kienzler, PhD candidate, to continue her work among Albanian women in Kosovo; Irene Hofmeijer, undergraduate student on Environmental Sciences, to conduct her BSc thesis data gathering on environment and mental health among the urban poor in Lima, Peru; Abdel Hamid Afana, post-doctoral student, to support his research work in psychological evaluation of PTSD in the Gaza strip; Fannie Martel-Latendresse, MSc candidate to support her fieldwork on domestic violence and mental health issues among Aymara women of El Alto, La Paz (Bolivia); and Nicole D'Souza, MSc candidate, to collect her data on resilience among survivors of the war in the Peruvian highlands in Ayacucho, Peru.

All of the students listed above finished their respective degree, with the exception of N. D'Souza who is expected to finish her MSc in September 2012. The success of this initiative can be seen through the research interest and positions that the awards' recipients now hold, for example: C. Robillard , is presently Quebec Research Program Coordinator, Dollard-Cormier-Institut universitaire sur les dépendances, and Professeure associée, Université du Québec à Montréal. She continues her research on health outcomes of sexual and gender-based violence, including sexual exploitation and human trafficking in Canada and Latin America; health inequities and access to services in marginalized populations, women in prostitution and the sex industry and gender-based analysis; Paula Godoy-Paiz is completing a post-doctoral degree in the Social Etiology of Mental Illness (SAMI-CIHR) Program at the Centre for Addiction and Mental Health; Hanna Kienzler is completing a Global Health Research (GHR-CAPS) post-doctoral fellowship at the Douglas Mental Health Institute and has accepted a staff position as lecturer, in the newly created Department of Social Studies, Health and Medicine at King's College London, in the U.K; Fannie Martel-Latendresse finished her MSc and now is working for OXFAM as an Advisor in Social Work - Justice between men and women, in El Alto (La Paz), Bolivia. Details of the TGH fellows' current work/position and research interest can be found in *Annex IV TGH LMIC Fellowships/Scholarships and McGill Small Grant Awards***.**

TGH McGill-Douglas staff in collaboration with the TGH country teams and partner institutions organized four International Courses (2007-2010) in each of the participating countries on the topic of Violence, Trauma and Mental Health Research reaching a total of 443 participants. At the request of TGH partners, several additional courses and workshops were

further offered with the attendance of TGH McGill-Douglas faculty and the participation of local faculty and experts. For example, in Guatemala City two additional courses were organized: an intensive course on the use of "Qualitative Research Methods in Health Research" (2009) and a "Workshop on Data Analysis Techniques for Qualitative Research" (2009). In Nepal an International Workshop on "Violence, Trauma and Global Health" was conducted in collaboration with CVICT and the Department of Psychiatry at Tribhuvan University and a "Workshop on Writing Research Articles for International Peer Reviewed Journals" was offered at CVICT, in Kathmandu (2010). In Peru, three "National Workshops in Post- Disaster Management" were organized together with the Ministry of Health, after the earthquake of 2007 in Pisco, Ica and Chincha Alta; an "International Course on Violence and its Impact on Health" in Lima (2009); a course for "Strengthening the Capacities of Professionals and Students on Community Mental Health with a Population Approach", in Ayacucho (2010); a "TGH International Course on Qualitative Research in Mental Health" in Lima (2010) and, the "TGH International Course on Suicide Prevention" in Lima (2010). All programs are posted on our website and the recommended readings are available in CD-ROM upon request.

At the country level, the *TGH Guatemala team* trained a total of 922 professionals and students. During the first half of the TGH program, the training focused on the diagnosis and management of mental and behavior-related disorders and the trainees ranged from aboriginal women in El Chiché to medical students at the Universidad Nacional de San Carlos de Guatemala. During year four, as a response to the emergency produced by the tropical storm Agatha in June 2010, the TGH Guatemala team in collaboration with the National Program of Mental Health (NPMH) conducted a series of CB activities addressed to Ministry of Health's psychologists and other volunteer health personal. The main focus of this training was mental health interventions for children in disasters. The workshops were repeated three times with a total of 140 participants. Furthermore, in collaboration with the National Mental Health Network-NMHN, the TGH Guatemala team offered a forum on "Disasters and Mental Health" held in Guatemala City, with an attendance of 35 participants.

The increasing interpersonal violence in Guatemala has shifted the interest of the policy makers and academics to the etiology of violence, assessment of trauma-related disorders and

development of psychosocial interventions. A second forum, "Violence and Mental Health", offered in collaboration with the *Oficina para la proteccion de los Derechos Humanos del Arzobispado de Guatemala* (ODHAG), was held again in 2010, with an attendance of about 45 persons including members of the NMHN, lawyers, social workers and representatives of the National Parliament. An important development of this last forum was group discussions on mental health actions and development of interventions, necessary to tackle the increasing problem of violence in Guatemala, and the threat to the mental health of the local population. A publication with the recommendations of this forum is being prepared and it will be released in 2012.

The *TGH Nepal Team* concentrated its CB efforts in expanding the training program for counsellors already in existence at CVICT, working with victims of torture. Between 2007 and 2011, a total of 45 counsellors and research assistants from the three working districts of Dang, Chitwan and Tanahu, received training on field research methods: including structured interviewing, sample size and sampling procedures, qualitative and quantitative research for field research assistants and refresher trainings in community- based psychosocial counselling. As stated above, CVICT is pursuing its efforts to receive government accreditation for the psychosocial training program.

In *Peru*, the Faculty of Public Health and Administration (FASPA) of the UPCH and its "Mental Health in Populations" academic program played a pivotal role for conducting collaborative work and support of a variety of training activities of the *TGH-Peru Team*. A total of 896 students, health care workers, and professionals were trained through workshops and seminars organized by the TGH-Peru Team. All of the CB activities were carried out at the UPCH campus, except for the course "Strengthening the capacity of professionals and students to work in community mental health" which was held in Ayacucho, Peru, October 14-15, 2010 which included presenters from the TGH-Peru Team, Ministry of Health and international faculty from USA and Norway. This course aimed to analyze the traumatic experiences and their consequences, and to give guidance to and share rehabilitation experiences among the participants following a human rights' approach. The course reached a total of 93 people (85 women and 8 men), among them psychologists, social workers, physicians, nurses, teachers,

anthropologists, sociologists, and journalists working at the Ayacucho MOH Regional Office and some of the local NGOs.

The international course on "Using qualitative research in mental health" was held at UPCH campus in 2010. Both Peruvian and visiting scholars from the TGH McGill-Douglas Team (D. Pedersen and D. Groleau), trained a total of 42 professionals from different fields and regions of the country (35 women and 9 men).

Finally, in response to an initiative of the TGH Country Team, an international course on "Suicide prevention: epidemiological and psychosocial perspectives", was taught in 2011, at the Casa Honorio Delgado, at the UPCH campus located in the Miraflores District. Lecturers included M. Tousignant (UQAM) and D. Pedersen (McGill) from Canada, and core team members of the Peruvian TGH program, Peruvian guest speakers working in the field of suicide prevention at the National Institute of Mental Health, Lima City Hall, and Ministry of Health. Eighty six participants attended the course (73 women and 13 men).

TGH Sri Lanka Team effort on CB was directed to a wide variety of mental health professionals: Registrars of Psychiatry, Medical Officers (with Diploma in Psychiatry), Psychiatry Diploma Trainees, Nursing Officers, Social Workers, Community Development Assistants, Academics & Researchers), NGOs and Government officers (Members of Ministry of the Interior, Health Ministry, National Statistics and Informatics Institute, Public Attorney's Office, Municipalities, Ministry of Woman and Social Development, University, National Institute of Mental Health and the National Police) reaching a total number of 949 participants.

Between 2008-2011 fifteen workshops were offered by TGH-Sri Lanka CB program: four series of CB training workshops, three for nurses and one for social workers, comprising a total of eight days each: six located at National Institute of Mental Health (at Angoda Hospital) and two at the Health Department in Batticaloa, Eastern Sri Lanka. The CB program in Sri Lanka was partnered in some of the actual training of health professionals by a Mental Health Trust in the UK, namely Barnet, Enfield and Haringey NHS Mental Health Trust. The period from March 2010 to April 2011 (Y4) marked significant achievements for the TGH Sri Lanka CB program. Nine series of CB training workshops for an audience of academics, mental health professionals, community workers and managers in NGOs were conducted with over 421

participants attending the workshop series. All the workshops were funded under the TGH program and organised by PRDA staff working closely with the TGH country leader, Chamindra Weerackody. For further details on the title of the courses, audiences reached, year and audiences reached, see *(Annex III TGH Capacity Building).*

Knowledge Transfer (KT)

KT comprises the third component of the program, which was built on the previous Research & Documentation (R&D) phase in Y1 and Y2, and along with the capacity building (CB) component, became a primary focus of efforts incrementally in Y3, Y4 and Y5. KT is understood as the iterative and timely process of integrating new knowledge and best evidence derived from the R&D phase, into policies, guidelines and practices of mental health workers and health care teams, including those based on humanitarian agencies, community-based resources and other relevant stakeholders. Its ultimate aim is to optimise mental health outcomes and individual and collective health care strategies in populations exposed to conflict, war and/or natural disasters.

There is yet no clear understanding of the dynamic process between new knowledge-innovation to its adoption and application by end-users, and we are just beginning to understand better the forces at play in changing current models of practice. The processes from knowledge generation to application are complex and influenced by many factors, including the local context (where practices take place) and the perceived relevance of new knowledge to its practical application and use. Various sources of knowledge –besides that emerging from research and the scientific endeavour– are needed by various users ranging from policy makers, to practitioners to managers and communities.

To reach numerous stakeholders, the TGH teams pursued different knowledge transfer strategies with emphasis on participatory action research (PAR) approaches to reach different groups of knowledge users including: a) first, the lay community domain including a variety of stakeholders, the communities which have been affected by violence or disaster induced trauma, including post-trauma survivors and their families; b) second, the health care domain, including academics (Co-PIs, researchers, academics and consultants who are part of the TGH country

team), and the wider network of health care providers, including primary health care workers; and c) third, the institutional and humanitarian aid domain including government officials, NGOs, humanitarian aid organizations' staff, policymakers and managers. Agencies and actors from all three domains, some of which have made explicit their support to the TGH Program, were in turn stratified in three levels: local, country and global and KT tasks were assigned to either TGH-Douglas-McGill (global) or TGH country teams (local and country).

KT activities during the period 2007-2009 (in the early stages of implementation), were mostly directed to academic, students, and professional audiences. In addition, and at an early stage, the TGH program reached the wider public with the creation in June 2007 of a web page http://www.mcgill.ca/trauma-globalhealth, which was periodically updated with the latest TGH news, photos, bibliographic references, tool kits, reports, and other resources which were widely used by the TGH team and by the general public. In 2007 as well, all TGH team leaders were provided with a McGill e-mail and password to access the McGill backbone, including the McGill Library. This tool was well accepted, easy to use, and proved very helpful in supporting the work of TGH country teams, in the preparation of training materials, grant submissions, reports and manuscripts.

In addition, a quarterly bulletin in the form of a TGH Newsletter was produced by McGill-Douglas (C. Errazuriz) with the collaboration of all TGH country partners and distributed to all TGH team members, collaborators, trainees, and other stakeholders. To view examples of the Newsletter, visit: http://www.mcgill.ca/trauma-globalhealth/news/newsletter.

In 2009 the TGH program received media attention with a feature interview available in IDRC's Website, "New Prescriptions for Traumatic Times", an interview with TGH team members Duncan Pedersen, Victor Lopez, and Marina Piazza which can be accessed on the following website: http://www.idrc.ca/en/ev-134667-201-1-DO_TOPIC.html . During this early period, the TGH team accomplished 39 presentations at scientific meetings, to community leaders and other stakeholders.

In 2009 preliminary results from ongoing research projects became available and since KT activities aimed at informing participating communities, NGOs and government organizations increased considerably. KT focused on the linkage between research results and

health policy and practices related to trauma and mental health outcomes. A summary of the KT outputs by TGH site and type can be seen in Table 7.

Table 7

Total number of Research Outputs by TGH sites and Type of Output

	Douglas-McGill	Guatemala	Nepal	Peru	Sri Lanka	Total
Journal articles (published/accepted)	23	3	1	2	3	32
Journal articles (submitted)	-	1	1	-	-	2
Conference/presentation at scientific meetings	92	8	2	7	16	125
Presentations (non-academic)	-	7	2	9	78	96
Book Chapters	16	-	-		13	29
Books	1			2	11	14
Theses	4	-	-	-	-	4
Websites	1	-	-	1	-	2
Media coverage. Articles in local or international media	4	1	1	2	2	10
Other: Reports/Working documents	-	5	9	14	-	28

TGH Peru directed its KT activities to an audience made up of students, mental health professionals, NGOs and government organizations, and included community-based organisations. Presentations with research findings were as follows: The findings of the study "Strengthening the Social Networks of the Peasant Communities of Lucanas and Santiago de Vado in Ayacucho" were presented to municipal officials, health professionals, and community leaders in Lucanas in 2008 and a poster presentation was done at the Biannual Conference, Universidad Peruana Cayetano Heredia, Lima, Peru (UPCH) in 2009.

The results of the study "Resilience and political violence in two schools in Ayacucho and Cuzco" were presented as a poster also at the Biannual Conference, UPCH, Lima, Peru in 2009. This poster won an award for best scientific presentation. The results of this study were presented in 2010 in Cusco to authorities and officers of the Cusco Regional Offices of Health

and Cusco Regional Office of Education as well as principals and teachers of the secondary schools that participated in the study, and who will be participants of an intervention to foster resilience among parents, teachers and students of the schools.

The National Academy of Medicine in collaboration with the TGH-Peru program, the Universidad Nacional Mayor de San Marcos, and the Ministry of Health, published a book based on the lectures given during the international course on violence and its impact on health. Members of the Canadian and Peruvian collaborated with chapters in the volume. The presentation and launching of the book took place in December of 2010. Momentarily, the core team is in the process of writing and editing the manuscripts of the outcomes of the several research projects that were carried out by the TGH program, which will be part of a second book.

The *TGH Sri Lanka Team*, reached an audience of community leaders, students, mental health professionals and academics with approximately 58 presentations on the research results carried out as part of the TGH program or as training workshops for mental health professionals. The program also used a number of forums such as CB training workshops, scientific meetings, seminars, conferences and workshops and publications to transfer these different forms of knowledge to the relevant stakeholder groups. For example, 78 presentations on a variety of subjects related to mental health were delivered, fifteen capacity building training programs and one experience sharing workshop conducted by the TGH-Sri Lanka Team. The topics covered included social and cultural dimensions of mental health and mental illness; role of mental health nursing; family work; social models of mental health interventions; models of community care; plurality of services currently accessed by people in Sri Lanka; the special needs of people affected by conflict, disasters and displacement; and the methods of consulting communities in the course of developing services, Of these presentations, 43 were delivered by local experts while the rest 34 were by foreign visiting experts. Moreover, 6 other presentations were given by TGH Project Consultant, Project Lead and Fellows at scientific meetings, workshops, seminars and conferences organized and conducted by outside parties.

Two of our TGH partner institutions, *CVICT Nepal and CIBP Guatemala* received an additional Knowledge Transfer grant of $20,000 each to support specific KT activities. While the TGH-Guatemala team focussed their KT efforts in knowledge-users situated at the top

(government authorities, MOH officials and decision-makers), the TGH-Nepal team preferred to concentrate its efforts to strengthen KT activities addressing the needs of partners working at the community level, including the PHC workers, psychosocial counsellors, and community-based agents in the Village Development Committees (VDCs), as well as training of non-professional mental health workers (i.e., counsellors). While in Nepal the KT experience was successful, also shows the many challenges in working with government officials at the local level (e.g., the demand for "stipends" or "incentives" as a condition to attend meetings), in a context of reported corruption and impunity of local authorities, irregular payment of salaries for psychosocial counsellors, and instability of government appointed officials both at central and district levels. The reasons why the TGH Nepal team focussed relatively less in developing policies and programs at the governmental level are to be found in the political turbulence of the first two years of the triumphant Maoist movement, the deactivation of the monarchy, and the making of a new constitution and new government. All of this generated a fairly unstable central government, with frequent and periodic changes in government officials. The poor sustainability of health sector officials and periodic changing of representatives made almost impossible the sustained involvement of national stakeholders and policy-makers in KT activities.

The *TGH- Guatemala Team* aimed at an opposite end trying to establish and strengthen partnerships at the national level, while restraining their community-based KT actions to a relatively small women's organization (*Ajpu*) in the Chiché area, north of Guatemala City. In fact, the TGH-Guatemala team strengthened its linkages with government institutions such as the National Mental Health Program (NMHP) at the MOH, the Universidad Nacional de San Carlos de Guatemala, and the Guatemalan Mental Health Network (GMHN) in Guatemala City, while few KT activities were reported at the community level. This was a direct consequence of the early attrition of the TGH-Guatemala Team as explained above. Two of the initial TGH Guatemala partners who were actively involved at the community level, namely Medicos Descalzos working in the Quiche region, and the Centro de Análisis Forense y Ciencias Aplicadas (CAFCA), working at various locations across Guatemala, either were dismantled or ended prematurely their partnership with TGH-Guatemala and therefore most community-based planned interactions suffered a significant reduction.

KT approaches often conceptualise knowledge transfer as professionally packaged research outputs or single evidence-based messages which should be acted upon (Eccles et al., 2005). In reality, both the Nepal and Guatemala TGH teams did not use packaged research outputs since their own research was still in the initial phases, but rather used knowledge from a variety of sources (i.e., published and unpublished), and their own research experience and naturalistic knowledge exchange processes that supported their aims with regard to creating mental health awareness, disseminating knowledge and empowering the community at large.

In both countries, KT activities did not address the challenge of actually accessing locally conducted studies since most findings remained either under reported or were published in the gray literature or journals that are not indexed in bibliographic databases. This is not surprising since we already know that LMIC researchers contribute only 5% of the mental health research-related articles to the internationally indexed literature, which is another reason to take existing local knowledge production and dissemination efforts into account as an important, but insufficient source of disseminating knowledge (NSF, 2007). Our KT strategy aimed to foster solid and durable collaborations between researchers and health practitioners, to increase the likelihood of publication, regional representation, expanding access to scientific literature, as well as translating articles into languages other than English and making knowledge accessible to the lay public. Both TGH country teams in Nepal and Guatemala, made substantive efforts to translate and publish materials in the local language, but the results were relatively modest, as many of the intended government and professional audiences are either Spanish (in Guatemala) or English (in Nepal) spoken and have limited literacy, do not read and/or write in their vernacular languages (Maya languages in Guatemala and Nepali and the many linguistic variations in Nepal).

To share and disseminate the knowledge acquired throughout the four years of the TGH program in Nepal, workshops were carried out aiming at different audiences. At the Community level, ten Village Development Community (VDC) level workshops were conducted in three districts of Nepal with a total attendance of 286 persons. The participants came from the VDC local level officers, community members, local NGOs and clubs, school teachers, local profit and non-profit organizations, politicians and local volunteers. The aim of these workshops was to

disseminate the work done by CVICT-TGH program through the Community Mental Health Promotion Program (CMHP), its effectiveness and obtain feedback on how the program should be run in the future. At the district level, workshops were conducted in each of the three districts of Nepal with the participation government officers, teachers, community people, politicians and journalists, professionals from the mental health sector, students and other profit and non-profit organizations. The aim of these workshops was to disseminate the work done by the TGH-Nepal Team, the CMHP program and update the current situation of mental health in Nepal.

While the TGH McGill-Douglas team followed a more conventional KT path and strategy and during the project cycle did approximately 100 presentations mainly aimed at an audience of students, graduates, mental health professionals and academics, including the public at large (for a comprehensive list of KT activities, publications/reports and presentations done by the TGH program, please refer to *Annex VI: TGH Presentations and reports),* our TGH country partners followed different KT paths and used completely different approaches to the problem of translating knowledge to knowledge-users.

The KT experience in the TGH program, tells us much of the important efforts made by the TGH country teams to complete the activities as planned and, at the same time, shows the many constraints, barriers, and contextual elements which may explain the sometimes poor or low levels of implementation in some of the planned KT activities. In fact, the conventional KT approach followed by the TGH McGill-Douglas team could hardly be extended to the other countries, since this approach often fails to acknowledge prevailing structural conditions in LMICs, such as an asymmetric or unequal distribution of power, resources and money, the profound ethnic and cultural differences, and a rigid system of social stratification (e.g., caste system in Nepal). No doubt these structural inequalities have a powerful impact on knowledge generation, transfer and utilization of research results, as well as on decision-making styles, which are largely shaped by multiple “factors other than evidence” (Davies, 2004). Such factors may include local kingship systems which discriminate in favour of relatives rather than merit or equal opportunity, or simple speculation by the local elites on potential benefits of immediate return or power personal gains.

Funds leverage

The TGH program through all its partners was able to obtain a total of CAD$ 3'055,579 in *cash* contributions in the form of grants and awards to TGH country teams in support of research activities, training, conferences and publications during the five years of program implementation (Table 8). It has been estimated that about $500,000 were in kind contributions, made up of consultants, personnel, support staff and occasional contracts (i.e., interviewers, field workers, etc.), equipment and supplies, office space, conference rooms, local transportation, reporting and publications. Comparatively speaking, Guatemala procured a significant amount of *in kind* resources from the Universidad San Carlos de Guatemala and the Ministry of Health to support the national mental health survey. The total amount of cash and estimated in kind contributions is CAD$ 3'905,579, which more than doubles the total GHRI Teasdale-Corti direct contributions between 2007-2011. (For details on funding leverage by country, *see Annex II:TGH Additional Funding 2007-2011*)

Table 8

Funds Leverage by TGH Country Team for the period 2007-2011

	Cash contributions (in CAD$)	Estimated in kind contributions (in CAD$)
Canada (McGill-Douglas)	1'818, 799	600,000
Peru (UPCH)	5,600	50,000
Nepal (CVICT)	1'165,080	100,000
Sri Lanka (PRDA)	66,100	50,000
Guatemala (CIBP)	-	50,000
Total	3'055 579	850,000
Grand total	3'905 579	

4. ANALYSIS OF TGH PROGRAM OUTCOMES

TGH Program outcomes at the global scale

There is a growing body of evidence –confirmed by our experience during the TGH program implementation– that the short and long-term consequences of organised violence, endemic conflict and war on civilian populations are much more complex than initially thought. As explained above, one clear outcome of this experience is that the consequences of a war cannot be assessed by the number of casualties, the numbers of refugees and internally displaced populations, or the material losses and breakdown of social services resulting from it. Beyond these numbers, the hidden part of the iceberg holds an additional burden of disease, disability and death, and other less evident but more pervasive ecological, social and economic consequences in the medium and long-term. Environmental degradation, dislocation of food production systems, and exodus of the work force, are some of the consequences difficult to assess, all of which have profound implications in the local economies, resulting in poor health outcomes, suffering and distress of survivors, which often goes beyond the current generation, affecting subsequent generations in a not yet well understood process of inter-generational transmission.

Evidence from studies conducted in the aftermath of World War II, the Indochina wars and more recently, in central Asia and some countries of the African and Latin American and Caribbean regions, have consistently shown that exposure to multiple physiological stressors, including famine induced malnutrition, occurring *in utero* or early infancy, may lead to chronic diseases later in life, ranging from osteoporosis to cardiovascular disease and diabetes (Markowitz, 1955; Toole and Waldman, 1997; Gluckman and Hanson, 2005). It is known that sharp declines of childhood growth and stunting has been shown in many European countries during World War II. For instance, a study by Bruntland et al. (1980) conducted in Oslo, Norway, revealed a decline in height of school children in the mid-1940s, as a direct

consequence of food shortages and adversities experienced during the German occupation. In Guatemala, stunting has been reported among Mayan and Ladino children from 1974 to 1984 (Bogin and Keep, 1999), a period where extreme violence and massacres were inflicted in the civilian population along with increased levels of poverty, ethnic conflict, nutritional deprivation and rising social inequalities.

Another spill-over effect of armed conflict and war, is the increase of interpersonal violence, armed assaults, homicides and other drug-related crimes, which has been made evident in field visits to TGH project sites, more specifically in Peru, among those cities in the central sierra region (e.g., Ayacucho, Cuzco, Huancavelica), formerly affected by political violence. The two decades dirty war between Shining Path and the military resulted in a breakdown of the state and virtual elimination of local authorities, creating territories controlled by local war lords who provide safe haven for the illegal production and trade of drugs. The VRAE (Valle del Rio Apurimac and Ene) region is a prime example of this, as the whole region formerly used as a refuge enclave during the war, is now an attractive pole for new settlers to work in *coca* clandestine plantations and get involved in coca leaves trade, processing and transport of PBC (*pasta básica de cocaina*) to distribution points. The coca plantations are under constant surveillance by Special Forces and the military, and violence erupts often between the police or the military and US special forces and DEA agents, with Shining Path guerrillas and both Colombian and local drug lords.

The political stability, the financial health, and the national security of virtually every country in the Americas, has been undermined by the drug trade. The drug trade, in turn, has worldwide rippling effects and creates multiple niches of endemic violence with most likely have significant negative repercussions in population health. It has been estimated that about 50,000 people have been killed –sometimes with gruesome violence– since the Mexican government launched an all-out war on drugs five years ago. Whole areas along the US-Mexican border are no longer under government control. Even prisons and penitentiaries, now full to bursting, have become in some cases operating centres for the drug chieftains in the Latin American region (Guillermoprieto, 2012).

Today, it is estimated that some 95 percent of the hard drug primary production, mainly *coca* and opium, is concentrated in countries undergoing turmoil, conflict and civil war or in post-conflict environments (Collier, Chauvet and Hegre, 2009), such as in the cases of Peru and Guatemala in Latin America, and Afghanistan in central Asia.

The case of Guatemala illustrates well the increase in drug-related street violence (e.g., kidnapping, armed assaults, and homicide rates), since the Central American region and Guatemala, Honduras and El Salvador in particular, has become a drugs trans-shipment corridor between the producing countries to the South (mainly Bolivia and Peru), the Colombian and Mexican drug cartels involved in drug marketing, and the consumption markets in the US and Canada to the North. In Guatemala, the homicide rates have reached a staggering 41/100,000in 2010, which is more than double the rates of Mexico, and almost ten times the average rate in the US.

In recent times, researchers have begun to explore how trauma is both a marker and product of social inequality and exclusion. Studies on narratives of distress like the ones we conducted in Peru, Nepal and Sri Lanka, have emphasized the taxonomies of stress, pain and suffering, but have not sufficiently contributed to our understanding of the many interrelations between poverty and exposure to violence as health determinants. This is so, despite the recognition that the effects of war cannot be separated from those of other forces such as structural violence and social injustice, unemployment, falling commodity prices, unbridled environmental exploitation and landlessness. Moreover, a wealth of data are available that show that imposed structural adjustment packages reflecting Western neoliberal economic models such as the case of Peru and Sri Lanka, and to a lesser extent Guatemala, most often result in slashed budgets for health, education and social welfare on which the poorest are most dependent. This may undermine the social fabric no less effectively than armed conflicts and wars (Summerfield, 1998). In short, when trying to explain disease occurrence, distress, trauma and social suffering in relation to collective violence and contemporary wars, the issues of poverty and social inequalities cannot be ignored (Dargouth, S., Pedersen, D., Bibeau, G., Rousseau, C., 2004).

In the final balance, despite the ongoing tensions and uncertainties, the attempts for restoration of peace and security after conflict has lead to dissimilar outcomes and has different

consequences and repercussions in each of the participating countries. The following is an update of the human rights situation and accountability on part of the government to legally punish those held responsible for the many abuses and human rights' violations infringed in civilian populations during and after conflict.

Human rights' violations and government's accountability by country

In *Guatemala* law enforcement institutions are weak and corrupted and have proved incapable of containing the powerful organized crime groups and criminal gangs that contribute to sustain one of the highest violent crime rates in the Americas.

Despite the signing of the Peace Accords in December 1996 aimed at ending 36 years of internal conflict, most if not all of the eleven agreements remain unfulfilled. Social disparities in the distribution of wealth are relentless in Guatemalan society (e.g., less than 2% of the population owns at least 60% of the land and natural resources) and human rights violations continues to prevail with the complicity of the police and army, with exclusionary practices directed at vulnerable groups (e.g., women, indigenous peoples). Escalating crime and impunity continues to be a matter of great concern. In 2007, the UNDP reported that the homicide rate for Guatemala City was 108 homicides per 100,000 inhabitants, one of the highest in the Americas region and in the world (UNDP 2007). While the Peace Accords have barely managed to stall Guatemala from falling back into a full scale civil war, it has failed to bring the country any closer to a democratic and egalitarian society. Although impunity remains the norm for human rights violations, some advances were made for accountability in 2011, including convictions of four former officers for a notorious massacre in 1982 and the first arrest of a top-ranking official for human rights violations.

The growing numbers of criminal gangs and illegal armed groups significantly contribute to escalating levels of interpersonal violence and intimidation, which they use to further political objectives and illicit economic interests, including drug-trafficking. Powerful and well-organized youth gangs, including the *Mara Salvatrucha* and *Barrio 18*, have used lethal violence against those who defy their control, including gang rivals, former gang members, individuals who collaborate with police, and those who refuse to pay extortion money. They are believed

responsible for the widespread killing of bus drivers targeted for extortion. According to local media, 183 bus drivers or their assistants were murdered in 2010, and 105 in the first eight months of 2011 (Human Rights Watch, 2012).

The presence of Mexican drug cartels, in particular the Zetas, has added to violence and lawlessness in Guatemala. In May 2011 the group claimed responsibility for a massacre at a ranch in neighboring Petén department, in which 27 peasants were murdered in cold blood and all but two were beheaded. Guatemala's justice system has proved largely incapable of curbing violence and containing criminal gangs and mafias. According to official figures, there was 95 percent impunity for homicides in 2010.

In May 2012, the overall situation deteriorated even further: high insecurity, widespread intimidation, including life threats to civilians and public actors, forced our TGH Guatemala Team leader, Victor Lopez, to seek refuge in neighbouring Costa Rica, where he is currently based, after evacuating most of his family from Guatemala.

According to Human Rights Watch, *Nepal's* political and peace processes remained stalled in 2011, resulting in turbulence and instability, weak governance and no progress on accountability for the killings, enforced disappearances of civilians, and other abuses that accompanied Nepal's civil war between 1996 and 2006. Prime Minister Jhala Nath Khanal resigned on August 2011, citing his failure to resolve the constitutional stalemate and his desire to make way for a consensus government. On August 28, days before the expiration of the mandate of the Constituent Assembly, a senior member of the United Communist Party of Nepal-Maoist (UCPN-M), was elected prime minister. He became the second member of his party to head the government since the 2008 elections.

Pushpa Kamal Dahal 'Prachanda', Chairman of the ruling Maoist Party, led a violent armed insurgency resulting in the death and disappearance of tens of thousands, widespread torture and displacement of hundreds of thousands of innocent civilians. Although Dahal's party signed a Comprehensive Peace Agreement, contested elections, and formed a government under its leadership twice, it has not formally renounced violence as a method of political change. It continues to be the Party's official policy to "capture state power" by any means – either through

ballots or bullets, through its actions in the parliament, the government or "people's revolt" from the streets (Dunham, 2012).

There has been some interference by the ruling Maoist party with field work conducted by CVICT, our TGH partner in Nepal. The party's local officials confronted field workers while they were collecting data related to the project, since they were suspicious of the reasons for asking questions from villagers. Nevertheless, the incident was forgotten and after a few days the work could proceed without interruptions.

Although it is prohibited under the interim constitution, the caste system which has deep historical roots in Hinduism, still maintains a very strong influence on society. Societal discrimination against members of lower castes, including Dalits, remained widespread, despite the government's efforts to protect the rights of disadvantaged castes, including intermittent initiatives to pay a grant to those willing to marry a Dalit. Lower castes experienced discrimination in areas including education, employment, and marriage. Better educated, urban oriented castes continued to dominate politics, as well as senior administrative and military positions, and control a disproportionate share of Nepal's natural resources. Resistance to intercaste marriage remained high. (U.S. State Department, 2012).

The government has made little progress in realizing economic, social, and cultural rights, and reports of lawlessness persist in many parts of the country, especially in the Terai and eastern hills. Armed groups and ethnic organizations have been involved in killings and extortion with impunity. There is no accountability for past abuses and the government and political parties have consistently failed to muster the will to establish some kind of compensation for even egregious wartime human rights violations. Not one person has been held criminally responsible for such crimes. In many cases, those accused of human rights' violations actively receive protection from security forces or political parties.

While women have constitutional guarantees of equality and strong representation in the Constituent Assembly, women and girls continue to face widespread discrimination. Trafficking, domestic violence, dowry-related violence, rape, and sexual assault remain serious problems. Sexual violence cases are often settled in private and, even when complaints are filed, police

rarely carry out effective investigations. Women in the Constituent Assembly have formed a caucus to push for greater focus on women's concerns.

In *Peru*, the defeat of Shining Path has restored the democratic process and improved security, and there has been little, if any, interference with TGH program implementation. However, the government driven repression is still ongoing in many indigenous settlements in the *sierra* and *selva* regions, in the coca plantation regions in the eastern slopes of the Andes (e.g., VRAE see above), as well as mining sites across the sierra region.

In June 2011 the National Human Rights ombudsman reported more than 200 ongoing social conflicts, many related to new mining ventures. Several have resulted in violent clashes between protesters and police, in which the latter appear to have used unlawful force. In April 2011, for example, three civilians were killed and more than 31 injured in Islay province when police reportedly opened live fire to clear a roadblock during protests against a proposed copper mining project. In May 2011 a civilian judge opened trial proceedings against two police generals and three other police officers for killing protesters during violent clashes in June 2009 in Utcubamba and Bagua provinces, in which 23 police and 10 civilians were killed (Human Rights Watch, 2012).

The National Human Rights ombudsman has reported use of excessive force and beatings by police and military personnel, prison guards, and members of municipal security patrols, which continuous to be a serious problem in Peru.

Human Rigths Watch reports slow progress in holding others responsible for abuses during Peru's internal armed conflict between Shining Path and the Peruvian military. Top officials in the former government of Alan García, whose term ended in July 2011, often criticized judicial investigations. In 2010, the President signed a decree amounting to a blanket amnesty that would leave most of the crimes unpunished. The measure was eventually withdrawn after national and international protests. Still, the military's refusal to provide information continues to obstruct judicial investigations, and most perpetrators continued to evade justice (Human Rights Watch, 2012).

In the aftermath of the quarter century war, *Sri Lanka* has made little progress toward justice for war violations committed by both sides during the long civil war, including the

government's indiscriminate shelling of civilians and the LTTE's use of thousands of civilians as "human shields" in the final months of the conflict. According to the latest HRW World Report, since the war ended the government has not launched a single credible investigation into alleged abuses. In August 2011 the Defense Ministry issued its own report on alleged abuses and human rights' violations, conceding for the first time that government forces caused civilian deaths in the final months of the conflict, but taking no responsibility for laws of war violations and concluding without further investigation that the deaths were the unfortunate collateral damage of war (Human Rights Watch, 2012).

The government has gradually released many, but not all, of the more than 11,000 suspected LTTE members detained at the end of the war and sent to "rehabilitation centers." The government denied detainees important due process guarantees, such as access to legal counsel, and thousands have spent two years or more in detention. In 2011, new reports of "disappearances" and abductions in the north and the east emerged, some linked to political parties and others to criminal gangs. The government has lifted its restriction on travel to parts of the north, although it maintains a very high security presence.[6] Violence, including sexual assault, by so-called grease devils, some of whom could allegedly be traced to military camps, recreated civilian insecurity in the north and east of the island.

Pressure on accountability from key international actors mounted following the April 2011 release of a damning panel report commissioned by the UN secretary-general. Several countries—including Britain, Canada, Australia, and the United States—called on Sri Lanka to investigate the allegations contained in the report. The European Parliament adopted a resolution in May 2011 urging Sri Lanka to immediately investigate the allegations and the European Union to "support further efforts to strengthen the accountability process in Sri Lanka and to support the UN report." Also in May 2011 the UN special rapporteur on extrajudicial, summary, or arbitrary executions called on the government to investigate "textbook examples of

[6] The end of the war opened up the opportunity for the TGH-Sri Lanka Team to restart their field work in 2011 in the districts of Jaffna in the north and Batticaloa in the east, which were affected especially hard by the civil conflict.

extrajudicial executions" in Sri Lanka following a review of evidence related to government execution of prisoners.

Violence and gender inequalities

There seems to be consensus that one vital factor explaining why women are discriminated against and tend to be targeted of rape or interpersonal violence – as in the case of Guatemala and other countries where gender discrimination is highly prevalent – is because of the central role women play in maintaining social cohesion and solidarity at all levels. Often, such forms of interpersonal violence have been intentional socio-political tactics integrated within an overall war fighting strategy, aimed at inflicting further damage to the enemy by degrading and demoralizing women and their communities (Baingana & Bannon, 2004). The intentional targeting of women by structurally integrating violent practices against women into military doctrine as a way to attack the "will to fight" in an "enemy collective", has become a pervasive part of military strategy (Hargreaves, 2001). The rape inflicted by soldiers among Quechua women in Peru and brutal murders of women in Guatemala are therefore an attack on the collective ethos using sexual aggression as a weapon of war and remains one of the most pervasive forms of interpersonal violence. These targeted women are part of vulnerable groups at particularly heightened risk for violence: female adolescents and youngsters, pregnant and breastfeeding women, as well as disabled and elderly women.

While there are substantial variations in how cultures define gender roles, in many societies the identity, social status and roles of women emphasize their relational linkages with their father, husband, and children. The loss of one of these social anchors through war or natural disaster may be devastating to women's social status and identity, placing them at high risk for psychological distress (WHO, 2002). Both in the Guatemalan and Peruvian cases, widowhood implies loss of loved ones, grief and social disruption, and above all displacement and loss of livelihood, all impose severe constraints and represent additional health burden on those surviving women. To become a widow in the Peruvian highlands is close in many ways to a death sentence, as most women, especially those 50 years old and over, are thrown into extreme poverty (Pedersen, 2008). In Nepal, the forced conscription of women as soldiers and/or military

service imposes serious risks to which young women are largely unprepared to face. Moreover, as providers of water, food, and firewood for their families, women in traditional societies may be forced to enter unsafe areas increasing their risk for disease and injury (i.e., mined fields) while taking a personal risk for the well-being of their loved ones. Excess deaths among women have been well documented following many natural disasters such as the cyclone that hit Bangladesh in 1991 or the *tsunami* in Sri Lanka in 2004 (Oxfam International, 2005).

To date, relatively little attention has been given to gender issues in the literature on the effects of war on population health even though gender disparities seems to be a pervasive issue (Garcia Moreno & Reis, 2005). In our experience in Sri Lanka post-tsunami, relief efforts tended to be male-centered, which is not only unsound but reflects already existing gender inequities which are accentuated in these emergency situations. Furthermore, although women and girls comprise over 65% of displaced persons (Kottegoda, 1999), they are often invisible in planning post-conflict or post-disaster operations. Emergency management agencies and others responsible for emergency relief such as first responders, fire personnel and law-enforcement agencies are primarily staffed by men; thus, recovery efforts tend to overlook women's specific needs.

Treatment and intervention strategies in the global context

The global movement for the provision of humanitarian aid has developed beyond the provision of food and shelter to include different forms of psychological support, counseling or assistance, ranging from the provision of basic psychological "first aid" (Sphere Project, 2004), to improving and scaling-up "evidence-based treatment packages" for people with mental disorders, including various forms of psychotherapy (Horton, 2007), to more eclectic forms of intervention (Batniji, Van Ommeren, & Saraceno, 2006). Many of these initiatives are portrayed as value free, internationally valid, and widely applicable.

However, most of these initiatives tend to marginalize the critical voices of medical and social scientists who argue that the Western discourse on mental health only makes sense in the context of a particular cultural and moral framework and, therefore, becomes problematic in the context of other cultural, social and political settings (Bracken, 2001; Almedom & Summerfield,

2004; Kienzler, 2008). While social, political and economic realities structure the context in which violence is experienced (Bracken, Giller & Summerfield, 1995), barriers to achieving better health and wellbeing include, but are not limited to, inequalities of social class and gender, racism and other forms of discrimination, including structural violence, collective trauma and relative deprivation (Singer, 2004). This critical approach calls for the development of research and action strategies and programs that would encompass the broader terrain of global health from the equity, human rights and social justice framework, and demands closer examination of the interplay of the traumatic experience with individual and collective health outcomes as well as the natural history of trauma-related disorders and the processes of resilience, healing and recovery that often follow.

The Trauma and Global Health (TGH) program has been particularly sensitive to these complexities and has raised questions and issues aimed to contribute more holistically to the development of mental health interventions for survivors of violence, by supporting core cultural values, resilient structures, as well as social cohesion and agency in all four participating countries. In the following, we will illustrate how the TGH program integrates these questions into research and action programs by briefly introducing the program and providing specific case studies from Guatemala, Nepal, Peru and Sri Lanka.

Armed conflicts tend to lead to both direct and indirect health consequences. Direct health consequences include violent death, injury, disability, psychological trauma and sexual violence in various forms (Brennan & Nandy, 2001; Waldman, 2001). Indirect health consequences are ascribed to the disruption of economic and social systems which people use to address their health needs, the famine and epidemics that follow such disruptions, and the diversion of economic resources to military ends rather than to health needs (MacQueen & Santa-Barbara, 2000; Sphere, 2004). Until recently, health interventions, dealing with the direct and indirect consequences of war, were largely driven by the fact that infectious diseases and malnutrition were responsible for a large portion of mortality rates (Waldman & Martone, 1999). Consequently, non-lethal conditions, such as mental illness or psychological trauma were ignored or simply left behind. This changed somewhat in the late 1980s and beginning of the 1990s as poor mental health outcomes and trauma-related disorders gained more visibility among

government agencies and NGOs, as well as international agencies, which are now incorporating a psychosocial component for both individual and collective assessment tools and interventions (Kienzler & Pedersen, 2012).

In order to gain insight into trauma-related health problems in diverse populations worldwide, culturally validated screening instruments have been developed. That is, protocols and scales based on the lists of symptoms in DSM-III-R, DSM-IV, ICD-9 and ICD-10 have been translated into local languages, thus allowing investigators to distinguish "symptoms" attributed to traumatic experiences from seemingly similar kinds of psychological distress. This, in turn, helps clinicians and policy makers to distinguish between different syndromes such as acute stress disorder and adjustment disorder, as well as major depression, panic disorder, dissociative identity disorder, and chronic PTSD (Hinton & Lewis-Fernandez, 2010) and, thus, determine the needs of afflicted populations (Young, 2006; see also Mollica, Cui, McInnes, & Massagli, 2002; Mollica, Caspi-Yavin, Bollini, Truong, Tor, & Lavelle, 1992; Mollica & Caspi-Yarvin, 1991).

Studies on health outcomes among war-affected populations focus mainly on assessing the prevalence of psychiatric symptoms, primarily symptoms of PTSD which include next to a history of exposure to a traumatic event (criterion A), two criteria and symptoms from each of the three symptom clusters: intrusive recollections (criterion B), avoidant/numbing symptoms (criterion C) and hyper-arousal symptoms (criterion D). A fifth criterion concerns the duration of symptoms (criterion E) and a sixth assesses functioning (criterion F). While criteria B and C point to psychological modes of expressing distress, the symptoms subsumed under criterion D point to the assumption that people suffering from psychological distress, depression, anxiety and personality disorder tend to develop somatic symptoms (American Psychiatric Association, 2000; Ritsner, Ponizovsky, Kurs, & Modai, 2000). Since 1980, the symptom clusters constituting PTSD have grown while some of them vanished in importance across time. These variations in symptom clusters reflect advances of medical theories as much as new knowledge and changes in medical diagnosis and treatment. Interestingly, however, criterion A, the traumatic event creating the distressful memory, has remained untouched so far.

Most research recognizes that higher rates of symptoms are associated with higher numbers of traumatic experiences (Scholte, Olff, Ventevogel, de Vries, Jansveld, Cardozo, &

Crawford, 2004). This characteristic is called dose-response, and it is argued that individuals could possibly develop PTSD "regardless of other risk-factors once the trauma load reaches a certain threshold" (Neuner, Schauer, Karunakara, Klaschik, Robert, & Elbert, 2004, p.1).

A literature review conducted by Hinton and Lewis-Fernandez (2010) shows that DSM-IV-TR-defined PTSD is diagnosable in diverse cultures, but varies in terms of its precise rates. Studies on refugee and displaced populations affected by various forms of war trauma have found very high rates of PTSD among participants (Johnson & Thomson, 2008; Miller, Kulkarni, & Kusher, 2006). For example, Marshall and colleagues (2005) assessed the prevalence, comorbidity and correlates of psychiatric disorder in the US Cambodian refugee community by conducting cross-sectional, face-to-face interviews on a random sample of households. The analysis of 490 interviews revealed that all study participants had been exposed to severe trauma before immigration and, consequently, suffered from PTSD (62%), major depression (51%) and alcohol use disorder (4%). PTSD and depression were comorbid findings in the population and each showed a strong dose-response relationship with measures of traumatic exposure. Pedersen et al. (2008) conducted a cross-sectional survey among indigenous peoples in the Peruvian highlands addressing the point prevalence and distribution of mental health problems such as depression and anxiety, and sequelae of exposure to violence-related stressors as reported in the selected population (N = 373). The results showed high rates of mental health problems: All General Health Questionnaire-12 positive cases were administered the Hopkins Symptoms Checklist-25 and more than half of these respondents (N = 144) scored positively for anxiety and/or depression. The administration of the Trauma Questionnaire (TQ) to the population suffering from anxiety and depression revealed that the number of positive cases reporting symptoms within the last month compatible with a PTSD diagnosis represented a point prevalence of 24.7% (N = 92). Similarly, Cardozo et al. (2003) reported a 25% point prevalence of PTSD among Kosovar Albanians; Sabin et al. (2003) found that among Mayan refugees in Mexico, 11.8% met PTSD symptom criteria; Dahl et al. (1998), using a self -report measure, discerned a prevalence rate of 71% for current PTSD in their sample of displaced Bosnian women in a war zone; and Sondergaard and colleagues (2001) found a prevalence rate of 37%

for current PTSD in their sample of Iraqi and Kurdish refugees in Sweden using a combination of self-report measures and interview methods.

In response to the high rates of trauma-related disorders, a wide range of therapeutic interventions were developed and exported to war-torn societies worldwide. These include pharmacotherapy (the alpha-adrenergic blocker prazosin, anticonvulsants, novel antipsychotics such as olanzapine and risperidone, benzodiazepines, the monoamine oxidase inhibitors (MAOIs), phenelzine and brofaromine, selective serotonin reuptake inhibitors (SSRIs) and other antidepressants), and psychotherapies such as exposure therapies, Eye Movement Desensitization and Reprocessing (EMDR), cognitive restructuring, coping skills training, and group therapy. At present, the effectiveness of these therapies in diverse populations remains uncertain. In 2008, the Institute of Medicine (IOM) published a Veterans Affairs (VA) commissioned systematic review to assess the scientific evidence on such treatment modalities. Surprisingly, the committee found that for all drug classes and specific drugs reviewed in each of the classes the evidence is inadequate to determine efficacy in the treatment of PTSD. With regard to psychotherapies the committee states that only for exposure therapies is the evidence sufficient to conclude efficacy in the treatment of PTSD. Their conclusions are disturbing: not enough research has been carried out about treatment modalities; the majority of the reviewed drug studies were funded by pharmaceutical manufacturers; subpopulations were not researched well enough; research on treatment of PTSD in US veterans has been inadequate to answer questions about opportunity of intervention, settings, and lengths of treatment that are applicable in this specific population; no consensus on a generally accepted definition of recovery in PTSD could be found; no conclusion could be reached on the value of intervention early in the course of PTSD based on the treatment literature; and no conclusion could be drawn regarding optimal length of treatment with psychopharmacology and/or psychotherapy (IOM, 2008).

These results support studies conducted by psychiatrists and medical anthropologists who have questioned the validity of the PTSD syndrome and most cross-cultural interventions for decades. Critical psychiatrists and anthropologists blame the international therapeutic model for employing inadequate research methods (Summerfield, 2005). More specifically, it is argued that although researchers employing structured questionnaires seek to extract exact numbers, the

answers tend to be filled with uncertainty. For example, Turner and colleagues (2003) make explicit that different studies conducted with Kosovar Albanian refugees in the UK produced results that do not agree with each other. While Albanian-speaking clinicians found a low prevalence of rates of PTSD and depression when applying diagnostic measures, self-report measures generated much higher rates in the same sub-sample. According to van Ommeren (2003), inconsistent findings in research may result from random processes and non-equivalent measures, procedures or samples, but may also be due to low validity. Evidence of the measurement validity and reliability cannot necessarily be generalised across populations, and this lack of generalisability may be particularly problematic when the original measure is translated into different languages. McHugh and Treisman (2007) add to this that the generally employed questionnaires are over-inclusive and wrongly assume that the subject understands the question the same way as the researcher does since socio-cultural factors influence the clustering of symptoms and the extent to which symptoms are experienced as distressing.

In a similar vein, Miller, Kulkarni and Kusher (2006) argue that trauma-focused epidemiology is of limited value to community-based mental health and psychosocial organizations that aim to go beyond the prevalence of PTSD symptoms in the communities in which they work. While epidemiology has elevated the individual as "appropriate unit of analysis", the approach ignores processes through which culture influences the experience of distress, help-seeking behaviour and healing. In other words, the PTSD model is considered to have important limitations as it fails to consider indigenous expressions of disorder, idioms of distress and ethnocultural sensitivities in assessment including norms, formats, language and concepts (Ehrensaft, 1995).

The TGH program acknowledges that knowledge production (KT) efforts in LMICs are largely ignored, dissemination is severely limited, and most initiatives in KT do not address the challenge of reporting on ongoing or past studies being conducted. This is partly related to the fact that many of these studies are either not reported or are reported in journals that are not indexed in bibliographic databases. Thus, it is crucial to establish collaborations between researchers coming from different national backgrounds to increase the likelihood of publication, regional representation, expanding access to scientific literature, translation of abstracts or full

articles, editing and translation services, and finally, workshops in scientific writing. Emanating from this, the TGH program has tried to foster the production and dissemination of knowledge at different levels. On its website the TGH program provides open access to detailed power point presentations, research reports, selected scientific articles from the current scientific literature, as well as unpublished manuscripts, essays, reports, documentation and articles produced and published in the gray literature by TGH country teams. More specifically, the publications are based on (a) talks and workshops delivered to students, community leaders, and other stakeholders; (b) presentations at scientific meetings; (c) reports and interviews provided to public media; (d) reports, working documents; and theses and (e) publications in scientific journals.

The amount of available information is impressive and shows that in spite of many limitations it is possible to overcome barriers to KTE if resources such as access to the available scientific literature are shared between researchers and practitioners in high-income countries and LMICs.

5. OVERALL ASSESSMENT AND RECOMMENDATIONS

Globalization and fragmentation

Today, globalization and fragmentation are world dominant forces at play, simultaneously exerting major influences in the configuration of vast social sectors, realigning political fronts, and generating alliances, antagonistic tensions and conflict in various forms. Under the growing influence of globalization we are increasingly confronted with rising tensions between “cosmopolitanism” and “nationalism”. While the relentless process of globalization (transnational economic trade, global communication patterns and transnational social movements) has generated an illusion of a world without borders, social and ethnic groups that continue to persist within the boundaries of nation-states are reminders that we are far from ideals suggesting the “end of territoriality” (Jung, 2003). If such social and ethnic groups successfully resist assimilation into the nationality that the state represents, they may call into

question the political recognition and legitimacy of the state. Resulting conflict in connection with unresolved cultural, religious, ethnic and/ or class disparities is often related to human rights abuses, escalating political violence and long-term confrontations between opposing segments of the society (Pedersen, 2002).

As we have seen in the introduction of this report, in the second half of the 20th century, the number of such ethnic conflicts and wars has increased significantly. Despite the fact that they are fought at different times and places, their primary causes remain the same: inequities and differential access to critical resources and fundamental quarrels about ideology and/or the nature of collective identity, including nationalism and the processes and problems of state-building. It is well established that due to the increase in armed conflicts, the number of victims and survivors grappling with trauma-related (mental) health problems has increased significantly as well. Much of the recent research on the effects of war in civilian populations, especially post 9/11, has been largely driven by concepts such as stress, war-trauma and Post Traumatic Stress Disorder (PTSD), which in turn has led to the development of different initiatives, interventions, and humanitarian assistance programs.

This global movement for the provision of humanitarian aid has developed beyond the provision of food and shelter to include different forms of psychological support, counseling or assistance, ranging from the provision of basic psychological "first aid" (Sphere Project, 2004), to improving and scaling-up "evidence-based treatment packages" for people with mental disorders, including various forms of psychotherapy, to more eclectic forms of intervention (Batniji, van Ommeren, & Saraceno, 2006). Many of these initiatives are portrayed as value free, internationally valid and widely applicable.

However, most of these initiatives tend to marginalize the critical voices of medical and social scientists who argue that the Western discourse on mental health only makes sense in the context of a particular cultural and moral framework and, therefore, becomes problematic in the context of other cultural, social and political settings (Bracken, 2001; Almedom & Summerfield, 2004; Kienzler, 2008). While social, political and economic realities structure the context in which violence is experienced, barriers to achieving better health and wellbeing include, but are not limited to, inequalities of social class and gender, racism and other forms of discrimination,

including structural violence, collective trauma and relative deprivation (Singer, 2005). This critical approach calls for the development of research and action strategies and programs that would encompass the broader terrain of global health from the equity, human rights and social justice framework, and demands closer examination of the interplay of the traumatic experience with individual and collective health outcomes as well as the natural history of trauma-related disorders and the processes of resilience, healing and recovery that often follow.

Relief, Recovery, Rehabilitation, Peace-building and Development

White and Cliffe (2000), delineated the main strategies third parties have to opt to restore or bring peace to a region shaken by conflict, disaster or war. These are most often referred to as 'relief', 'recovery', 'rehabilitation', 'peace-building' and 'development' initiatives. 'Relief' is usually interpreted as the provision of the "five essentials": protection/rescue, health, food, water and shelter. 'Peace-building' has been defined as local or structural efforts that foster or support social, political and institutional structures and processes which strengthen the prospects for peaceful coexistence and decrease the likelihood of the outbreak, reoccurrence or continuation of violence (Goodhand, Lewer & Hulme, 1999). 'Development' implies a wider process of moving forward in the direction of peace, justice, social equity, and an absence of, or at least a declining trend in, ignorance, disease and poverty (Smillie, 1998).

There seems to be much less consensus regarding the meaning of 'recovery' and 'rehabilitation' as these concepts are regarded by many as essential 'bridges' or linkages between relief and development. 'Recovery' strategies tend to be based on wider livelihood-based approaches (Lautze & Raven-Roberts, 2006) which investigate how individuals, households and communities "seek to achieve and sustain their livelihoods" (Ballentine & Nitzschke, 2005) by taking economic, political, social and cultural factors into account. Similarly, 'rehabilitation' implies a host of short-term measures to bring about a situation in which life does not depend totally on (often less than adequate) relief supplies, measures which can yield benefits within the

relatively ‘calm’ spaces in ongoing conflict, as well as providing a ‘bridge’ or ‘linkage’ to some form of development and (eventually) lasting peace.

This so called ‘linkage model” is embraced by a great number of organizations, including bilateral agencies and international funding organizations; civil society organizations made up of international and national Non-Governmental Organizations (NGOs), community-based and faith-based organizations; as well as academic and research oriented institutions (WHO, 2010). Although this linkage model can play an important role in supporting ongoing relief, peace-building, development and rehabilitation efforts, such as the case of the selected TGH partner countries, we argue that such interventions often blur the boundaries between humanitarian assistance and development work, whether governmental or non-governmental, and that the distinction between relief, rehabilitation and development strategies is to some greater or lesser extent irrelevant or of little practical use. That being said, in all four countries we found many examples of emergency relief operations, rehabilitation work, peace-building initiatives and development assistance programs, all coexisting and interacting with the host country in varied and complex ways. Emanating from this understanding, we suggest that the central question is not whether to bridge or link the various components on the continuum between ‘relief’ and ‘development’ when building an intervention in the aftermath of disaster, armed conflict and war, but rather how to identify effective means to achieve specific health outcomes that are not only feasible, relevant and sustainable, but also appropriate to people’s needs and priorities within a given context.

Other forms of intervention during or post-conflict and post-disaster, are well beyond our aims and means when building an intervention in the TGH participating countries, such as the provision of foreign aid (technical and economic assistance), the application of non-violent sanctions (military and economic embargoes), or ‘preventive’ intervention and coercive sanctions, such as application of military power to terminate a conflict or embargoes to put an end to flagrant violations of human rights (Pedersen & Kienzler, 2008).

Understanding trauma

In this report, we reviewed both short and long-term consequences of protracted violence, endemic conflict and war on civilian populations and their relationships which revealed to be more complex than initially thought. We have learned, that the impact of a war cannot be solely examined by counting the sheer number of casualties, the physically and psychologically wounded, and the displaced populations, but, there are many indirect effects expressed in the additional burden of disease and death, suffering and disability, and other less evident but more pervasive ecological, social and economic consequences in the medium and long-term.

In discussing specific mental health outcomes of war and violence in civilian populations, we focussed on psychological trauma and PTSD as a trauma construct and its changes over time, including issues pertaining to the heterogeneity and universality of the disorder. We further critically examined the relation of causality between exposure to traumatic events and psychological trauma, and the limited explanatory power of the linear model of trauma in which exposure to traumatic events invariably leads to PTSD as a single outcome. We addressed the question of what constitutes the sequencing of events in the progression between the initial acute reaction and the chronic stage among civilians exposed to life threatening circumstances.

The interconnection between higher rates of PTSD symptoms with the degree of direct exposure and higher numbers of traumatic experiences was presented and it was concluded that greater exposure to traumatic events was predictive of more abundant PTSD symptomatology. In conclusion, we considered the many limitations of the PTSD model arguing that mental illness is not the single consequence of trauma, but closely associated with social inequalities, gender disparities, poor nutrition and overall poor physical health. Therefore, the usefulness and applicability of PTSD as a category to diverse social and cultural contexts would depend on previous research conducted in the particular contexts in which is utilized (Kirmayer, Lemenson and Barad, 2007).

Based on the research conducted in all four countries, the PTSD model has proven to have important limitations in capturing the complex ways in which individuals, communities, and larger groups experience massive trauma, socialize their grief, and reconstitute a meaningful existence. For well over a decade, it has been suggested that in non-Western populations, such as

being the case of the TGH participating countries today, the *sequelae* of trauma are experienced as a cluster of signs and symptoms transcending the narrow boundaries of PTSD and manifested in local idioms of distress and diverse somatoform disorders (Young 1995; Summerfield, 1995; Pedersen & Kienzler, 2010).

Understanding stories of trauma, requires understanding the collective dimensions of violence and social suffering. Trauma experience is embedded in and emerges from multiple contexts, including biological processes of learning and memory; embodied experiences of injury, pain, and fear; narratives of personal biography; the knowledge and practices of cultural and social systems; and the power and positioning of political struggles enacted on individual, family, and community and national levels (Lemelson, Kirmayer & Barad, 2007).

Humanitarian interventions

There seems to be consensus that despite the abundance and variety of available treatment options, there remains a lack of solid evidence-base for psychosocial interventions aimed at improving mental health outcomes for populations in need. The guidelines reviewed in this report are serious attempts to standardise the various approaches to mental health care for populations affected by conflict and war, but they tend to be mostly based on expert opinion, literature reviews, or single case studies. It would be, therefore, essential to rigorously field test the proposed international guidelines before putting them to use in culturally and socially diverse settings.

The study of traumatic stress disorders emerge as one critical area of enquiry to assess the effects of the environment on the central nervous system, and this turns to be crucial as it may lead to significant changes in the existing health care paradigms and ultimately revise and improve current clinical practices and humanitarian interventions. We need to continue building solid research evidence that does take into account not only the opinion of experts, but above all the social and cultural context for understanding trauma-related disorders and, based on this new paradigm, develop effective clinical approaches addressing the needs and real concerns of people on the ground.

Among governmental, NGOs, and international organizations, as it has been the case in Guatemala and Peru, there has been a tendency to produce general guidelines with standard packages of interventions that not necessarily address the local and cultural and social context. Effective interventions require a more culturally nuanced assessment of health needs and coping and health-seeking behaviours, as well as strategies for mobilization of endogenous resources that foster resilience and social cohesion. The kind of research program we proposed developing in the TGH participating countries, remains crucial for assessing priorities, designing key interventions and establishing best practices to follow in post-conflict/disaster prevention and treatment programs.

Trauma-focused intervention initiatives are generally "exported" from Northern countries to disaster relief and post-war situations in LMICs in the South (Weine, et al., 2002). Although they sometimes are presented as "value-free" expert knowledge or "evidence-based practice," such humanitarian interventions are also ideological products of a globalizing culture (Summerfield, 1998; Atlani & Rousseau, 2000). The cultural contexts where the interventions are applied have differing norms, values and traditions, a range of attributions and understandings of illness, different ways of expressing emotions, distress and suffering, and different approaches to help-seeking, healing and coping with traumatic events and adversity. At present, we simply do not know whether specific mental health interventions that are being widely promoted effectively support or inadvertently undermine core cultural values and erode resilient structures, decreasing social cohesion and agency. Addressing these basic questions requires examining the social impact of mental health systems and services using both quantitative and qualitative methods that extend beyond the usual strategies for randomized clinical trials and outcome research.

Implications for collective interventions

Among the most important implications of the TGH program is that for collective interventions to be meaningful, they should reflect a macro perspective that recognizes not only the direct consequences of war and natural disasters, but also the transnational impacts of globalization and growing social inequalities on mental health. After five years of collaborative

work with the TGH Country teams, we remain convinced that is equally important to address both local and national health care issues within the global context and, at the same time, pay attention to how these multiple macro-level forces play out locally, in the lives of individuals, families and communities. More specifically, current approaches discussing the need for community-based interventions aimed at civilian populations highlight the importance of (1) assessing the transnational and structural forces *and* the local sociocultural setting; (2) relating these complex, multi-layered contexts to both the local formulation of problems and their endogenous solutions (i.e., resilience outcomes); and (3) identifying features of the culture and community that suggest local ways of coping as well as healing practices (see also Weiss, et al., 2003).

Thus, we would argue that in order to provide meaningful psychosocial assistance to individuals and communities in need, interventionists have to learn more about mental health problems and psychosocial stressors that community members identify as most important, as well as about the impact other forms of violence such as structural violence, institutionalised racism, gender-based discrimination, and so on, may have on mental health (see also Lemelson, Kirmayer, & Barad, 2007). To live up to the complexities involved, community interventions should combine both *emic* and *etic* approaches by taking existing healing strategies, initiatives and programs into consideration "in a participatory, empowering and ownership manner" (Aro, Smith, & Dekker, 2008). More specifically, experts discussing the need for community-based interventions stress the importance of (1) assessing the local sociocultural setting, (2) relating this context to the local formulation of problems, and (3) identifying features of the culture and community that suggest local ways of coping (Weiss, Saraceno, Saxena, & van Ommeren, 2003).

Humanitarian interventions need therefore to be reassessed and redesigned on the basis of the following principles: a) addressing the real concerns of survivors toward their devastated communities and ways of life, and the most urgent questions about human rights and social justice (Summerfield, 1995); b) trauma is rarely the most important concern of populations exposed to the atrocities of war and intentional violence, and most importantly, not all people exposed to traumatic experiences develop a trauma-related disorder; c) we should avoid the misconception of defining resilience only in terms of absence of diagnosable psychopathology,

and focus instead on resilient trajectories of adjustment and strategic survival adaptations overtime; and finally d) humanitarian interventions should not ignore fostering local endogenous resources such as social support and social rehabilitation frameworks, starting with the strengthening of damaged local capacities in line with local needs and emerging priorities.

It is of critical importance women be included as leaders in planning and implementing projects and interventions which will affect their physical and mental health. In order to access women's perspectives on the mental health consequences of war conflicts and natural disasters, it is necessary to include a gender-based comparative analysis. This comparative analysis would take into account the differential impact of social contexts on men and women by considering gender relations as an organizing principle of political, social, economic, and ethical spheres (Condition Féminine Canada, 1996). Because of societal class structure, this comparative analysis must also consider how race, ethnicity, age, geographic location and schooling interact with gender. Systematic attention to the impact of trauma on both men and women is essential for planning and implementing culturally appropriate and effective interventions in physical and mental health.

Entering the fifth year, the TGH Program emphasized the knowledge transfer (KT) component; that is, the expansion of local, country and global knowledge transfer networks, while we phased out ongoing research and documentation (R&D), and capacity building (CB) activities. When comparing the R&D, CB and KT activities undertaken in the four countries, the TGH program maintains that the practical application of the programs is culturally specific, and thus each country team decides on a different approach of how to reach their respective population targets, while maximizing the use of endogenous resources.

It would be important to ensure that the respective TGH Country Teams are able to secure enough funding from both inside the country and international sources, in order to continue and expand their work in the years to come. We believe that the TGH program has been successful in that it allowed researchers from different backgrounds and levels of training, to create culturally sensitive and sustainable research and intervention environments in their respective countries and selected sites, while at the same time consulting, managing and exchanging information related to research results, capacity building strategies, training and

teaching methods, and developing their own KT strategies across their countries, study sites and disciplinary fields. Much can be learned from such an approach that emphasizes knowledge exchange between countries in the South instead of imposing North American or European standards and value systems on particular cultural contexts in which people and organizations have to deal with diverse norms, values and traditions in order to understand mental illness and local expressions of distress and build effective, sustainable, and more appropriate interventions.

The Trauma and Global Health (TGH) program evolved as a global health research initiative aimed at responding to some of the issues pointed to above by generating a sustainable research and action initiative funded by the Teasdale-Corti Team Grant Program. There is a growing consensus among us in the TGH program that mental health interventions for conflict-affected populations must address not only individual needs, but also the broader impact of armed conflict and war, promoting a sense of safety, self- and collective efficacy, feelings of connectedness, solidarity and hope. However, translating these general goals into specific interventions requires a wider eco-psychosocial perspective, with a fair knowledge of individual and community psychology at the local level, and awareness of prevailing social, economic and political constraints, as well as a solid understanding of cultural meaning systems (Kirmayer et al., 2010).

Although there seems to be awareness of the importance of culture in most of the guidelines published by international agencies, there is little, if any, specific recommendations with regards to how to articulate cultural data (i.e., local idioms of distress) with the professional discourses of trauma and suffering, neither of how far local healing practices may be effectively incorporated into individual or collective interventions. As a consequence, mainstream approaches to diagnosis and treatment of trauma-related disorders overlook the extent to which the trauma experience is culture-specific in that personal, political, social, and cultural factors mediate the experience of war or other forms of violence (Bracken, Giller and Summerfield, 1995; Kienzler, 2008).

Concluding remarks

The TGH program argues that in order to rethink and re-examine the notion of disaster and war-trauma and related intervention strategies, three key issues have to be taken into

consideration: first, it is crucial to examine the effects of political violence and wars not only in terms of the immediate stressful events and economic and political hardships that are their inevitable precursors "but also for making the link between these and the broad social structures in which they originate" (Gibson, 1989; Pedersen, 2010). Second, the need to document non-western patterns of trauma-related conditions such as local idioms of distress and other adaptive and strategic responses to trauma on the individual and the collective level. And, third, it is crucial to assess the circumstances in which medical or psychological interventions help or hinder long-term recovery from traumatic experiences such as torture and war atrocities (Pedersen, 2010).

Moreover, it has to be kept in mind that mental disorders such as PTSD are not monolithic biomedical categories, but entities that are subject to interpretation in that they are differently understood across diverse cultural and social settings. Mental disorders may be seen as only one facet of suffering and does not account for other forms of distress that are related to a combination of traumatic events and stressful life experiences. Local idioms of distress attest to that and the ways individuals, families, and entire communities explain adversity and develop coping strategies and ways of healing. Consequently, we argue that the search for discrete disorders decontextualizes and essentializes human problems (Kienzler, 2008; Lemelson, Kirmayer, & Barad, 2007) and that we need to be more cautious about making false attributions and drawing erroneous conclusions while ignoring the presence of confounding variables in the chain of events leading to distress, mental illness or emotional states accompanied by painful memories of the past (Kleinman & Sung, 1979).

Based on this understanding, we would like to suggest that there are multiple pathways through which social inequalities, discrimination and violence can translate into mental health disparities. While psychosocial pathways seem to be most important, there is growing evidence of the physiological channels though which stressful negative environmental changes can affect endocrine and immunological processes (Dressler, Oths, & Gravelee, 2005; Wilkinson, 1996). This makes apparent that it is important to integrate both psychosocial and biological approaches in order to better understand the causality of the pathways (Bolton, 2010; Dohrenwend, 2000) that is, the complex relations and interdependencies, and the various ways in which these

interactions influence the distress and disease occurrence, illness experience and well-being of individuals, families, and communities (Buitrago, 2004; Martin-Baro, 1994).

Based on our experience in conducting the TGH program and field studies, particularly in Peru, we developed a structural interpretative framework to present in a simplified fashion these complex interrelations and interdependencies between various domains including the biomedical and biographical, the social and the cultural, and illustrate the causes and pathways by which these interactions influence mental health outcomes of individuals and communities (Braveman, 2006; Guruge & Nazilla, 2004; Lebel, 2003; Waller, 2001).

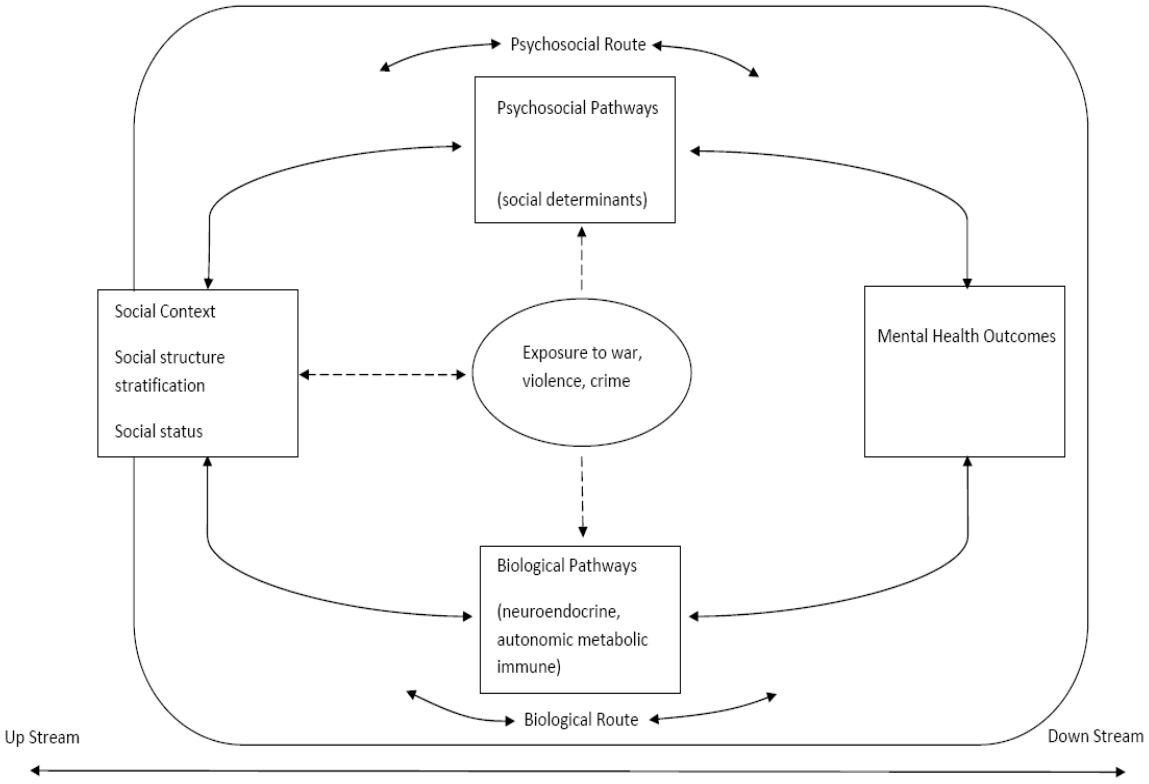

Figure 1: Structural interpretative framework

Looking at the structural interpretative framework, it becomes evident that there exist inextricable links between humans and their biophysical, social, political and economic environments resulting in both individual and population health outcomes, as well as configuring

their overall health status (Lebel, 2003). In constructing the framework we have adopted a perspective inspired by the social determinants of health approach used to understand the relationships between modern conditions of life, contemporary family patterns and social organisation, new cultural values and prevalent disease categories as defined by researchers and currently used by health professionals. In addition, we used an ethnographic lens to describe and analyse the local ways through which distress, mental illness and suffering are expressed, interpreted, reacted to, and managed on a daily basis by individuals, families and communities. Finally, we reinforce biological pathways leading from the exposure to traumatic events and other stressful life experiences to cellular dysfunction (neuroendocrine, autonomic, metabolic, and immune) and mental health outcomes as they are outlined in DSM and similar manuals. Thus, promoting health and well being in conflict and post-conflict settings has to take into account not only a more equitable distribution of psychosocial support and medical care resources to those in need, but also address the moral dimension of the issues at stake. Above all we need to clarify the *causal* pathways among the various bio-psycho-social components, since facts and correlations per se are neither sufficient evidence to guide policy nor to make ethical judgements (Deaton, 2011).

We conclude that it is through the development of frames, models and practices commonly used in medicine, psychiatry, and anthropology that we will eventually better understand how distress, mental illness and social suffering are transformed into nosographic categories and eventually absorbed in the realm of the psychiatric domain. We also acknowledge how the medico-psychiatric science and medical technologies are used both in the medicalization of the "problem" and as a form of social control often in detriment of local, endogenous resources. One may easily find multiple examples in industrial nations as well as in the developing world, of medical technologies aimed at controlling deviant behaviours (i.e., hyperactive children, drug addictions), as well as plagues, diseases and even natural lifecycle events (i.e., childbirth, menopause).

In our view, it remains essential to promote innovation and a greater heterogeneity of models, theories and concepts as a counterweight to the increasing homogenization of medical and psychiatric scientific knowledge and practice. The critical perspectives we have been using

in the TGH program in examining distress and social suffering, trauma and PTSD, may also be of relevance to a broad range of disease conditions, thus cutting across all areas pertaining to the global health and well-being of populations.

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