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# Political violence, ethnic conflict, and contemporary wars: broad implications for health and social well-being

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#### Abstract

Ethnic conflict, political violence and wars that presently shape many parts of world have deep-seated structural causes. In poor and highly indebted countries, economic and environmental decline, asset depletion, and erosion of the subsistence base lead to further impoverishment and food insecurity for vast sectors of the population. Growing ethnic and religious tensions over a shrinking resource base often escort the emergence of predatory practices, rivalry, political violence, and internal wars. The nature of armed conflict has changed substantially over time and most strategic analysts agree that in the second half of the 20th century, contemporary wars are less of a problem of relations between states than a problem within states. Despite the growing number of armed conflicts and wars throughout the world, not enough attention has been paid to the local patterns of distress being experienced and the long-term health impact and psychosocial consequences of the various forms of political violence against individuals, communities, or specific ethnic groups. The short or long-term impact assessment on civilian populations of poor countries affected by war have been scarce, and studies focussing on experiences of collective suffering and trauma-related disorders among survivors are beginning to emerge in the scientific literature. The medicalization of collective suffering and trauma reflects a poor understanding of the relationships among critically important social determinants and the range of possible health outcomes of political violence. © 2002 Elsevier Science Ltd. All rights reserved.

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#### Nationalism and the escalation of armed conflicts<sup>1</sup>

The escalation of armed conflicts in the contemporary world is usually related to one or more of the following: the emergence of nationalism and the political legacies of colonialism and the Cold War; unresolved cultural, religious, or ethnic conflict; the enduring presence of illegitimate, corrupt, authoritarian or repressive regimes and, most importantly, persistent inequalities over access to critical resources. According to a recent analysis of today's changing political world map, there are more than 190 nation-states, the majority of which have been created since the Second World War. On the other hand, the number of "nations," mostly composed of ethnic groups and indigenous peoples pre-dating the creation of the modern state, has been estimated at more

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<sup>&</sup>lt;sup>1</sup>This background paper focusses on the broader health implications of political violence and armed conflict. Within this context, the paper raised some issues and questions for debate in the conference's session on "Nationalism, ethnic cleansing and war: implications for health."

<sup>&</sup>lt;sup>2</sup>Once an ethnic group has become aware of its "distinctiveness," it will most often seek a form of political expression and recognition of its uniqueness—such as claiming a territory and subsequently becoming a "nation." If sovereignty over a given territory is effectively gained, a nation-state will evolve, usually accompanied by some form of nationalistic ideology (Isajiw, 2000).

than 6000,<sup>3</sup> with an even greater number of spoken languages. All such nations in the world when combined are estimated at around 600 million people (or 10–15% of the world's population) who claim rights over 25–30% of the earth's land surface and natural resources (Clay, 1994).

This apparent discrepancy in the population/resources equation has become a lasting source of conflict among ethnic groups, indigenous nations, and nation-states, since most often nation-states control access to and exploit these resources for their own benefit and are ready to use force to advance or protect their interests. Stern conflict and political violence arise when access to critical resources is under dispute, especially at times of general economic decay.

Since the Second World War, many wars fought under the banner of "national liberation" (or "national unification" like in Vietnam or Korea) were aimed at ending what is considered to be illegitimate rule over a more or less well-defined community or nation. Nationality is strongly anchored in the sense of uniqueness and distinctiveness of certain cultural values attached to a sense of place.

Under the growing influence of globalization and an imposition of a "global culture," we are more and more confronted with rising tensions between "nationalism" on the one hand, and "cosmopolitanism" on the other. The intersection of global processes with local or regional differences bring into focus "the ways in which identity is shaped, constructed, imagined and reconstructed for various political ends" (Marden, 1997). Moreover, the relentless process of globalization (transnational economic trade, global communication patterns, and transnational social movements) has generated mixed responses around the idea of "identity," challenging the very notion of "nationalism" and the existence of the nation-state, projecting an image of a world without borders.

At the same time, the fragmentation of blocks of countries, such as the former Soviet Union and Yugoslavia, and the rising number of states claiming secession or sovereignty seem to reaffirm "nationalism" as a political force and a contemporary reality. While nationalism is perhaps the most common expression of an ethnic group's assertion of its claims for political recognition and legitimacy, it often leads to armed conflict aimed at resolving disagreement and dissent. Genocide and the atrocities of "ethnic cleansing"—most often fuelled by extreme nationalism, tinted with religious or political aims—are other ways to put an end to ethnic conflict by imposing one group's total supremacy over another.

The official discourse of nationalism is widespread in form and content and often tends to dehumanise and stigmatise other peoples and ethnic groups as being biologically and culturally inferior, providing a justification for state intervention and forced assimilation or extermination. In Latin America, in the course of 500 years of colonization and the emergence of the new Republics, there are several examples of explicit or implicit official policies that, under the banner of nationalism, have proposed ethnic homogenization either by promoting selective immigration policies (in order to "dilute" the genetic pool of Amerindian ancestry) or by ethnic cleansing, in order to "even out" social and cultural differences and forge a "single" national identity.

In the second half of the 20th century, the number of ethnic conflicts and wars have increased significantly but their primary causes remain the same: differential access to critical resources and the fundamental quarrels about ideology and/or the nature of collective identity, including nationalism and the processes and problems of state-building.

#### The political economy of contemporary wars

The nature of armed conflict and wars has changed substantially over time and, today, wars take on different forms than in the past. Most strategic analysts agree that in the second half of the 20th century, contemporary wars are less of a problem of relations between states than a problem within states. According to Holsti (1996) the classical and persistent Clausewitzian conception of war "as the continuation of politics by other means" bears little relevance to the analysis of today's contemporary wars. Other forms of war and domestic conflict within states have replaced the classical great-power warfare, which was the predominant form of war in Europe for almost three centuries (1648–1945). The emergence of internal wars, the so-called lowintensity wars<sup>4</sup> 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 the wars of the third kind, the target is the local population, mostly the poor, including those who have an added symbolic value, like local leaders, priests, health workers, and teachers). Psychological warfare is a devastatingly effective central feature in these wars: terror and atrocities, mass executions, disappearances,

<sup>&</sup>lt;sup>3</sup>For instance, there are more than 450 nations in Indonesia, 200 in Brazil, 450 in Nigeria and 130 in the former Soviet Union.

<sup>&</sup>lt;sup>4</sup>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.

torture, and rape are the norm (Summerfield & Toser, 1991; Summerfield, 1995).

Ethnic conflict, political violence, and wars that presently shape many parts of Africa, Eastern Europe, Asia, and Latin America have deep-seated structural causes. The collapse of formal economies and the emergence of economic crisis in the marginal areas of the global economy lead to further impoverishment and food insecurity for vast sectors of the population in the poor and highly indebted countries, combined with growing ethnic tensions and conflict over a shrinking resource base (Duffield, 1995). The slow economic growth and modest achievements of many countries of Africa and Latin America in the 1970s were quickly reversed in the subsequent decades. In turning toward a more open and Western-oriented production regime, national economies attempted to increase production of raw materials and intensify traditional farming and mining activities. Intensification was a failed strategy, as the external debt soared and export trade declined. More importantly, intensification accelerated environmental decline, asset depletion, and the erosion of the subsistence base, resulting in further impoverishment, food insecurity, rural-urban migration, and growing ethnic tension over remaining meagre resources, which in turn lead to the emergence of predatory practices, rivalry, ethnic conflict, political violence, and internal wars (Duffield, 1991, 1995).

Both sectarian governments and subversive movements have used common strategies that have lead to ethnically structured internal wars or contemporary wars. Violence and armed conflict have generated massive exodus, depopulating rural areas and "choking" cities by terror and predatory practices while imposing a local war economy (Pedersen, 1999). In countries as far apart as Mozambique, Sudan, Angola, Sierra Leone, Guatemala, Colombia, Peru, Afghanistan, East Timor and the Philippines, sectarian and authoritarian governments and subversive groups have emerged and pursued much the same tactics: disruption of agricultural production (i.e. landmines in Africa and coca plantations in Latin America), systematic destruction of service infrastructure (health services and schools, communications, roads and bridges), sabotage of water and electrical supplies, poisoning of wells, killing of livestock and burning of harvests, disruption or elimination of local markets, confiscation of property and imposition of tributary peasant plantation systems. The annihilation of local authorities and the killing and prosecution of its symbols often accompany the physical destruction of the economic infrastructure. New "taxation" or appropriation systems are imposed to the local populations. Impunity and claims for "immunity" of warlords place the dominant groups above the law and make the system sanction-proof (Duffield, 1995; Pedersen, 1999).

The rising death toll of wars and atrocities

A complete record of war and atrocities around the world is beyond the scope of this paper. However, it may be useful to outline some of the most recent war scenarios in order to reveal the truly catastrophic proportions of human suffering and desolation in different regions of the world (see Map 1).

It has been estimated that, since the Second World War, there have been about 160 wars and more than 24 million war-related deaths worldwide, although certain estimates suggest that double this number of people have been killed. Civilian casualties have increased significantly and now make up approximately 90% of all war-related deaths in current times. In recent war scenarios, such as in the former Yugoslavia and in Somalia, about 9 out of every 10 people injured or killed were civilians. In 1996, The State of the World's Children estimated that within the previous decade, two million children had died in war, while two to three times as many had been wounded or disabled, one million orphaned and 12 million made homeless (UNICEF, 1996). In all, a significant proportion of the displaced populations and more than 80% of armed conflicts in the world involved, in one way or another, politically marginal "Fourth World" peoples (Nietschmann, 1987). By and large, indigenous populations have been most affected and subject to genocide in vast numbers.<sup>5</sup>

The war in Mozambique, Uganda, Sudan, Ethiopia, and Angola has produced from 100,000 civilian deaths in Angola to over one million in Sudan. The magnitude of the death toll remains unknown, but it has been estimated that the number of African civilian casualties in the 1980s was between two and three million (Copson, 1991). In the following decade, the continuation of conflict and ethnic wars in Sudan and the atrocities committed in Liberia, Eritrea, Ethiopia, in addition to the massacres between Hutus and Tutsis in Rwanda, has added millions to these dismal figures of violent death in Africa. The recent genocidal campaign and atrocities conducted by the Indonesian military in East Timor are another example in South Asia.

More recently, in Bosnia-Herzegovina, the Bosnian Serb and Croatian ethnic cleansing, though it was responsible for a relatively lower number of victims, received far more media attention than the death tolls occurring in Africa or South Asia. The NATO bombing campaigns in the Balkans followed by the Serbian attacks on Kosovar Albanian civilians resulted in large-scale destruction of villages and assassinations and a flood of some 350,000 refugees (mostly from the southern sections of Kosovo adjoining Macedonia and

<sup>&</sup>lt;sup>5</sup>It has been estimated that about 50 million indigenous peoples were eliminated prior to the First World War (Clay, 1994).



Note: Conflicts on this map had at least 1,000 deaths in any one year in the 1990s. There is no authoritative count of the dead in the recent campaign by Laurent Kabila in the Democratic Republic of Congo (Zaire). UN authorities suspect that more than 200,000 Rwandan refugees missing in Central Africa died in the campaign.

Sources: Stockholm International Peace Research Institute, SIPRI Yearbook: Armaments, Disarmament and International Security, 1991 to 1997 editions (New York: Oxford University Press: 1991-1997); Ruth Leger Sivard, World Military and Social Expenditures 1996 (Washington, DC: World Priorities, 1996); "Were 200,000 Slaughtered?" Foreign Report, No. 2459, August 7, 1997; Amy Shiratori, "Ogata Urges Japan To Accept Refugees, Spare ODA Budget, " Asahi News Service, July 23, 1997.

Map 1. Major armed conflicts of the 1990s. Map reproduced courtesy of the Carnegie Commission on Preventing Deadly Conflict, ⊚ 1997.

Albania), while unknown numbers of Serbs fled north to Serbia to escape the increasing violence, bombing, and ethnic cleansing campaigns.

In other parts of the world, such as Central and South America, there are many recent examples of ethnic conflicts and internal wars resulting in high death tolls, particularly among indigenous peoples: extra-judicial executions of Miskito Indians in Nicaragua; massive killing of Mayas in Guatemala and Tzotzils in Chiapas, Mexico; members of the Shuar nation killed in action in the Ecuador-Peru border dispute; murder of Yanomami Indians along the border between Venezuela and Brazil; indigenous leaders and their advisers (usually lawyers, priests, or trade unionists) in Brazil; and the annihilation and disappearance of Quechua peasants in the Peruvian highlands undertaken by Shining Path guerrillas and military repression. In the case of Guatemala, large

segments of the population have been displaced because of internal conflict and violence, the majority of them Maya Indians from the north- and southwestern regions of the country. It is estimated that, in the last three decades, approximately 75,000 Guatemalan Indians have disappeared or been killed by political violence, and more than 300,000 are refugees abroad, half of whom are in Mexico. In Colombia, the level of political violence and the massive assassinations conducted by subversive forces, the military and its paramilitary

<sup>&</sup>lt;sup>6</sup>According to the Guatemalan Supreme Court of Justice, over 200,000 children have lost one or both parents because of indiscriminate violence and widespread repression (Melville & Lykes, 1992). The long-term consequences of this deprivation on such a large cohort of orphans are still unknown.

associates have reached unprecedented levels and the number of refugees is well over one million.<sup>7</sup>

The lives of entire nations, ethnic groups, and 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).

#### Dislocation: internal displacements and refugees

While 20 million people have taken refuge across national borders (Toole & Waldman, 1993), another 150 million have been forced to flee their homes and become internally displaced. Most internal migrations and forced displacements are a result of war and ethnic conflict, fuelled by religious or ideological differences, disputes over land and property rights and stateguerrilla warfare, including low-intensity wars, all of which create extremely unstable and unfavourable conditions for survival. In the last decade, the regional and country figures are overwhelming: two million refugees in Central Africa from the 1994 genocide in Rwanda; 500,000 fleeing from the war between Armenia and Azerbaijan; another half a million running away from violence in Liberia; 100,000 Hindus fleeing from the disputed territories in Kashmir; 600,000 leaving the Balkans since the collapse of Yugoslavia, with two million remaining internally displaced in the region; a few more million from former or ongoing internal wars in Guatemala, Sudan, Sri Lanka, Myanmar, Cambodia, Iraq, Tajikistan, and so on.

In Africa, the magnitude of the population's internal displacement and patterns of refugee flow "suggest a redistribution of populations along ethnic and religious lines and perhaps an unraveling of the arbitrary political boundaries imposed under colonialism" (Kalipeni & Oppong, 1998). According to estimates made in the 1990s, there are over 5.4 million refugees in Africa (UNHCR, 1993), a conservative figure since it does not take into account the internally displaced. The geography of exile in Africa is complex and the pattern of displacement is visible alongside areas experiencing political violence and ethnic conflict. Certain regions are either hosting and/or expelling significant numbers: most notably across the Horn, central and eastern portion of Southern Africa (Mozambique, Malawi, Sudan, Somalia, Ethiopia, Uganda, Kenya, Chad, Zaire, Rwanda and Burundi) and parts of West Africa (Sierra

Leone, Togo, Liberia, Ivory Coast, Guinea, Senegal). According to some analysts, the root causes of ethnic conflict and political violence in post-independence Africa lie in a colonial history of administrative divisiveness and favouritism, poor governance, and growing social inequalities in a declining economy (Kalipeni & Oppong, 1998; Anthony, 1991).

The breakdown of the social fabric, family loss and disruption of daily life, lack of shelter and food shortages, the dismantling of basic services and destruction of the local infrastructure all contribute to extreme forms of suffering and disability. This new disease ecology (Pedersen, 1996)—especially in the low and middle-income countries—has lead to the re-emergence of infectious diseases and unexpected disease outbreaks (i.e. cholera, tuberculosis, malaria, diphtheria, plague, etc.), the emergence of new epidemics (i.e., HIV-AIDS, Ebola, Lassa fever, etc.), increasing malnutrition and poor health outcomes, and towering rates of mental illness and behaviour-related conditions (Desjarlais, Eisenberg, Good, & Kleinman, 1995).

In the Latin American region, another effect of dislocation occurs when large sectors of working-age men and women are forced to flee and relocate to peri-urban areas of intermediate or main urban conglomerates, resulting in booming satellite cities and shantytowns. In these settings, poverty and high unemployment, inadequate shelter, incomplete families, alcohol and drug abuse, domestic and street violence are dominant features that often turn into multiple sources of distress and adversity, likely to have physical and psychosocial consequences, closing a vicious circle which perpetuates violence and related disease conditions.

#### Arms trade, landmines and 'bombies'

The arms' trade represent the largest trade volume in the world today: about 800 billion dollars annually. Some governments spend more on military expenditure than on social development, communications infrastructure, and health combined. In 1996, the world average military expenditures were \$31,480 (per soldier) while education figures reached \$899 (per student) and barely \$231 in health (per capita) (Sivard, 1996). As world trade becomes more global, so does the trade in

<sup>&</sup>lt;sup>7</sup>Colombia has been the leading Western hemisphere recipient of US arms and military training as violence increased through the 1990s. However, military aid to Columbia is now increasing, under a "drug war" pretext dismissed by almost all serious observers (Chomsky, 1999).

<sup>&</sup>lt;sup>8</sup>It is problematic to estimate the impact that war and political upheaval may play in the emergence of new epidemics such as AIDS. Nevertheless, we can safely admit that political violence and war have a significant impact simply by creating optimal conditions for transmission of diseases such as tuberculosis and AIDS among refugees and survivor populations. In Africa, diseases such as AIDS have devastating consequences–killing the young adult population and creating, for instance, millions of "AIDS" orphans," now numbering more than 15 million.

conventional arms. In order to make up for lack of domestic sales, newer markets must be created.

The USA and Britain have the largest and second largest arms' trading business in the world respectively. Sometimes, these arms sales are made secretly and knowingly to human rights violators, military dictatorships, and corrupt governments. This urge to globalize arms production and sales ignores the grave humanitarian consequences of proliferation of conventional weapons or other weapons of mass destruction. While every nation has the right and the need to ensure its security, in these changing times, arms requirements and procurements may need to change too.

Toward the end of the 1990s, there were 110 million landmines in place worldwide, each one capable of killing and maiming several people (UNICEF, 1996). In Africa, nearly 20 million landmines were reported in about a dozen countries, which results in about 12,000 people killed every year and double that number maimed, permanently blinded, or disabled. Landmines not only kill or maim, but also dislocate the social fabric—impairing agricultural land, preventing farming and maintenance of irrigation systems, blocking roads and disrupting communications and supplies. In the mid-1990s, about 8000 km of roads were listed as mined in Southern Africa. On the Zambia–Zimbabwe border, one million acres remained unproductive due to landmines (Kalipeni & Oppong, 1998).

Landmine victims exert additional pressure on scarce local health services: lengthy hospitalizations, in addition to surgery and rehabilitation services, represent a significant proportion of the shrinking hospital budgets. In Angola, for instance, hospitals report about 24 landmine casualties a day and consequently holds the dubious record of having one of the highest amputee rates in the world (currently over 20,000, many of them children) (Kalipeni & Oppong, 1998; Mazur, 1993).

In a recent interview, Noam Chomsky (1999) deplored that "... every year thousands of people, mostly children and poor farmers, are killed in the Plain of Jars in Northern Laos, the scene of the heaviest bombing of civilian targets in history it appears, and arguably the most cruel... the deaths are from 'bombies,' tiny anti-personnel weapons, far worse than land-mines: they are designed specifically to kill and maim, [while leaving buildings, trucks or other physical infrastructure unharmed]. The Plain was saturated with [...] millions of these criminal devices, which have a failure-to-explode rate of 20-30% according to the manufacturer, Honeywell. The numbers suggest either remarkably poor quality control or a rational policy of murdering civilians by delayed action. These were only a fraction of the technology deployed, including advanced missiles [used to] penetrate into caves where families sought shelter. Current annual casualties from 'bombies' are estimated from hundreds a year to an annual

nationwide casualty rate of 20,000, more than half of them deaths."

The main sources of insecurity in the world today are the threat posed by nuclear and other weapons of mass destruction and the risks of using conventional arms in military and non-military confrontations (insurgency, organized crime, terrorism, etc.) (Carnegie Commission, 1997). It seems paradoxical that there are effective international mechanisms in place for monitoring and possibly preventing economic or financial crisis in the world markets, but there is no set of indicators directed to monitor conflict and crises in the political sphere nor a system that will detect potential deadly conflicts in the world today. Ethnic conflicts leading to massive killing and retaliation, such as the one experienced in Rwanda, could have been easily prevented. Security must be framed within an effective global system of advanced conflict warning, independent from official state bodies and based on accurate databases to track the stage at which conflict begins to take shape (Vorkunova, 1996).

Many questions, few answers

In the greater world scenario, the Western powers, lead by the US and the United Kingdom, have applied the new label of "State of Concern" to seven countries: North Korea, Cuba, Iraq, Iran, Libya, Sudan, and Syria. In the diplomatic language, this new specific category replaces the term "rogue states" which was applied to those states considered to be out-laws or "pariah states" because they had chosen to sponsor international terrorism and political violence as a means to impose their political and religious aims (Chomsky, 2000). This unilateral declaration, in lieu of protecting national interests and far from promoting security, creates general unease and increases the sense of insecurity in the world today. Paradoxically, the end of the Cold War (1947-1989) demarcates a new status in world affairs which is not of concord and peace but of continuing and systematic confrontation in search of new enemies.9

There is a growing body of evidence suggesting that the interrelationships between political violence, ethnic conflict, war and population health are more complex than initially thought. A few central questions still remain largely unanswered: Do our conceptions of nationalism as a political force adequately explain the current chaos or is this chaos symptomatic of a new geography of globalization with all its paradoxes (Marden, 1997)? Which role is played by the superpowers in sustaining ethnic conflict and wars? And similarly, what is the role of corrupt and sectarian governments and of subversive movements in contem-

<sup>&</sup>lt;sup>9</sup> In this regard, Chomsky (2000) raises a sharp question: this time, the confrontation is against whom?

porary wars? Are the classical understandings we have derived from European and Western armed conflicts and Cold War experiences relevant to the analysis of contemporary wars? Do the various world regions and cultures have the same security problems as the powerful nation-states of the West?

Moreover, what is the long-term health impact of ethnic conflict, political violence and wars in a given population? What about the role of other psychosocial factors such as resilience, social cohesion, coping skills, the density and quality of social support networks? How is political violence linked to poor health outcomes and trauma at the individual and at the community levels? Are post-traumatic stress disorder (PTSD) and other trauma-related disorders universal and unavoidable outcomes of political violence? What is the role of other social factors, such as racism and extreme nationalism, alongside poverty and wars, in determining the health and disease equation? What is the social production of collective and individual suffering? I intend to address some of these questions in the following section.

## The health implications of political violence, ethnic conflict, and wars

Emerging political struggles, armed conflict, and wars have a very different impact on present populations than the "conventional" wars of the past. Contemporary wars often mean continuous violations of cease-fire and neutrality of health services and relief operations. At times, health services and health workers become "useful" or strategic targets of political significance. Medical personnel has been subject to death threats, mass executions, murder, or arbitrary detention and torture by the military and repressive forces in the Philippines, Iraq, Croatia and Bosnia, the Occupied Territories, Indian Kashmir (Physicians for Human Rights, 1993; Summerfield, 1995). In Mozambique, during the conflict between RENAMO guerrillas and government forces, half of the primary health care network (over 1000 health centres) was looted and destroyed and landmines were placed in the vicinity of hospital facilities. In Nicaragua and Peru, health posts in war zones were sacked and subsequently ruined to prevent one or another faction from getting medical supplies or services of any kind. Incursions by guerrillas and military personnel resulted in the exodus of health workers, with subsequent deactivation or destruction of services, surgical facilities, maternity wards, etc. In El Salvador, mutilated bodies of health workers were exposed with the letters EM (Escuadrón de la Muerte or Death Squad) carved in their flesh, as a brutal warning to hostile opponents (Summerfield, 1995).

The implications of contemporary wars in the collective health status and well-being of affected

populations, at home or in exile, go beyond the loss of life and destruction of physical infrastructure: the devastation of the social and cultural fabricthe people's history and life trajectories, their identity and value systems (which are in many ways vital for their survival) are under threat to fade away or disappear. The instilled terror, social polarization, and forced militarisation of daily life (Martin-Baró, 1989), lead to significant changes in the lifestyle of civilian populations (powerlessness, erosion of social capital, etc.) that are difficult to measure and attribute significance in terms of life expectancy or resulting morbidity and burden of illness. On the other hand, the collective responses in confronting extreme violence and death represent a range of critical mechanisms for restoration and survival, which should not be underestimated.

The literature focussing on long-term effects of war and atrocities has attempted to establish direct linkages between the original experience of trauma and persistence of certain symptoms in some individuals, at times for as long as 50 years, interpreted as anxiety, depression, alcohol and drug abuse, and chronic PTSD. Summerfield (1995, 1996) reminds us to be more cautious in making false attributions and drawing erroneous conclusions while ignoring the presence of confounding variables in the chain of events leading to mental disorders or emotional states accompanied by vivid and painful memories of the past. In phenomenological terms, these emotional states are not necessarily psycho-pathological but rather illustrate aspects of normal cognitive functioning and fall within the range of normal responses to an adverse context.

Whether internally or cross-nationally, the majority of refugees are clearly women, children, and the elderly. They are often subject to various forms of exploitation, rape and sexual abuse, and are exposed to political violence and torture. The conditions found in sheltered zones, in larger cities, or across the border in neighbouring countries are not necessarily better than the ones left behind. The lack of sanitation, food and water shortages, loss of family and social support networks, crowding and overall deprivation experienced in refugee camps impose additional health risks, increased mortality and morbidity, and inflict further suffering among survivors. Outbreaks of cholera, dysentery, tuberculosis, acute respiratory infections and other viral diseases, such as measles, are common occurrence in most refugee camps. Pregnancy, sexually transmitted diseases, and AIDS are also on the increase among refugee women and young adolescents who have experienced sexual abuse. According to UNICEF (1996), in Rwanda virtually every adolescent girl who had survived the genocide of 1994 was subsequently raped. Rape and commercial sex is also

widespread in refugee camps, often resulting in unsafe abortions and the spread of sexually transmitted diseases, including AIDS. The displaced are usually deprived from social, material, and emotional support systems, which may make them more fragile and vulnerable to environmental adversities and social distress.

Working with refugees is a complex task. The epidemiological instruments and the clinical tools for diagnosis developed in Western medical settings are unreliable when applied to people from a different culture (and language), who in addition have been exposed to traumatic experiences like the atrocities of war. As most research in refugees' health is carried out in northern European countries, the US and Canada, the tools used in the assessment are usually derived from professional categories (such as the DSM, the International Classification of Diseases, etc.) that may have little relevance to the culturally constructed categories and local idioms of distress. The dominant scientific models used in the construction of health questionnaires and symptom checklists generally applied to refugees, not only define the problems people should experience but also "... prescribe the ways of how people should adjust or acculturate after immigration, how they should express their distress, how disorders should be classified, and how distress should be remedied. " (Eisenbruch, 1991).

There seem to be two opposing approaches to the issue of displaced populations and refugees. One, represented by the universalistic "refugee studies" position (i.e., all refugees experience overwhelming trauma, with an emphasis in the description of clinical effects), and two, a more relativistic "anthropological" position, by which within the refugees' experience, violence and trauma are considered as "normal" occurrences. Both extreme positions tend to ignore how other factors, such as gender, class, religion, ideology, and income influence the refugee experience (Zarowsky, 1995).

Despite the growing number of armed conflicts and wars throughout the world, not enough attention has been paid to the local patterns of distress being experienced and the long-term health impact and psychosocial consequences of the various forms of political violence against individuals, communities, or specific ethnic groups. The mental health effects of a changing social and economic context (i.e., globalization) and the impact of political violence and wars have not been sufficiently documented. The short- and long-term impact assessment on these populations have been scarce and studies focussing on experiences of socio-political violence, collective suffering, and presence of disease and trauma-related disorders are beginning to emerge in the scientific literature.

It is worth noting that a significant proportion of publications on the psychological impact of political violence are based on studies of victims of terrorist attacks in countries such as France, Northern Ireland, or the US (see, for instance, Difede, Apfeldorf, Cloitre, & Spielman, 1997; Parson, 1995; Weisaeth, 1993; Abenhaim, Dab, & Salmi 1992; Shalev, 1992; Curran, Bell, Murray, Loughrey, Roddy, & Rocke, 1990; Cairns & Wilson, 1989; Bell, Kee, Loughrey, Roddy, & Curran, 1988) or are based on fleeing migrants, refugees, or torture victims from Southeast Asia or Central America emigrating to North America or Europe (see Mollica, Wynshak, & Lavelle, 1987; Beiser, 1988; Beiser, Turner, & Ganesan, 1989; Hauff & Vaglum, 1993; Gorst-Unsworth, Van Velsen, & Turner, 1993; Gorst-Unsworth, & Goldemberg, 1998; Ramsay, Gorst-Unsworth & Turner, 1993; Rousseau, Drapeau, & Corin, 1996; Rousseau, Drapeau, & Platt, 1999 among others). Studies on the impact of political violence in Latin America, for example, have been mostly limited to the victims of the guerra sucia (dirty war), families of the desaparecidos (disappeared) in Argentina, and the people who were tortured and/or murdered by the military dictatorship in Chile in the 1970s and 1980s. In Central America (Guatemala and El Salvador) efforts have been made to assess the impact from a social and epidemiological perspective, but most of these have been uneven and short-lived. 10

One of the most startling observations to be made after reviewing the literature on traumarelated disorders concerns the relative absence of studies of the most affected populations in their original locations or countries of origin. According to a recent literature review on the epidemiology of PTSD, of the 135 studies meeting the inclusion criteria, only eight (6%) were conducted in developing countries. For instance, in the Latin American region, only three studies of PTSD were completed with victims of natural disasters (one in Mexico and two in Colombia) and none among victims of terrorism, torture, political violence, and wars (De Girolamo & McFarlane, 1996).

Contextualized studies of trauma are rare, to the point that "trauma" has almost become synonymous with PTSD in both popular and scientific thought. Recent studies suggest that PTSD symptoms do not necessarily represent the continuation of the initial responses to trauma and epidemiological studies indicates that the incidence of PTSD may be lower and more variable than previously thought (Breslau,

<sup>&</sup>lt;sup>10</sup> See, for instance, the pioneer work on political violence in Central America carried out by Ignacio Martin-Baró (1989) and colleagues. Unfortunately, this valuable work was tragically interrupted when Martin-Baró was killed by the Escuadron de la Muerte in November 1989, in El Salvador.

1998; O'Brien, 1998). Epidemiologic studies in the general population show that only a fraction<sup>11</sup> of those exposed to traumatic events develop PTSD, the risk of PTSD varies according to the type of trauma experienced, and that past exposure to trauma predicts future exposure (Breslau, 1998). PTSD prevalence in the US general population has been estimated to be between 1 and 9%, which may be explained by the differences in the sensitivity of instruments used to measure the presence of PTSD but also may reflect the presence of other "hidden" factors involved (Shalev & Yehuda, 1998).

Furthermore, an ongoing discussion revolves around the issue of trauma that may have not only negative (e.g. psychopathological) effects but may permit the development of new capacities or strengths and coping styles (Punamaki & Suleiman, 1990; Macksoud, Aber, & Cohn, 1996; Rousseau, Said, Gagne, & Bibeau, 1998). As will be discussed below, there is also a polarized set of conclusions with regard to which are the most appropriate and effective clinical interventions, if any, regarding trauma-related disorders and PTSD.

The challenge of this apparently contradictory set of findings highlights, in the first place, the necessity of examining 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); second, the need to document non-western patterns of trauma-related conditions: local idioms of distress and wide range of responses to trauma—including adaptive and strategic responses—at the individual and at the collective level; and finally, third, 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.

#### War trauma and PTSD

The health impact of political violence and wars should be examined not only along the lines of sheer number of casualties and trauma-related disorders among survivors, but also on the individual and collective levels. Indirect effects such as disintegration of family and social networks, disruption of the local economies, dislocation of food production systems and exodus of the work force have profound implications in the health and well-being of survivors.

Whatever structural, social, and cultural factors lie upstream in the sequence of causes and health determinants, at some point—downstream—there are psychological and biological processes at work, linking the paths between the macro-contextual determinants (the political economy) with the micro-worlds of individual experience. What are, then, the bio-psycho-social pathways, if any, between ethnic conflict, political violence, wars and health outcomes? How does this web of causes, linkages, and pathways determine the level of suffering, trauma, disease and death in a given population? By what mechanisms do social forces ranging from poverty to racism and political violence become embodied as individual experience (Farmer, 1996)?

Most of these questions have no definite answer yet. In fact, scientists have been concerned about these questions since the end of the 19th century, when the meaning of "trauma" was extended from physical injury to include psychogenic ailments (Young, 1995). In reviewing the literature on trauma, there seems to be consensus that it was John Erichsen, a British physician, who first referred to the notion of trauma and nervous shock in his publication "On Railway and Other Injuries of the Nervous System" (Erichsen, 1866). Erichsen implied that in railway injuries, traumatic shock is produced by a concussion of the spine, drawing an analogy between nervous shock and a magnet struck by a heavy blow with a hammer. In the following halfcentury, the notions of trauma and nervous shock continued to evolve through the works of scientists such as Jean-Martin Charcot, Pierre Janet, W.H.R. Rivers, and Ivan Pavlov.12

Toward the end of that century and the years following World War I, Sigmund Freud turned his attention to trauma as the origin of hysterical attacks and traumatic war neuroses. These were the precursors to what was later described as an "epidemic" of "war neuroses" characterized by localized numbness, hypersensitivity and pain, anaesthesia, muscle contractions and paralyses, gastrointestinal and cardiovascular symptoms, etc. among British army servicemen. This collection of polymorphic symptoms was later labelled as "shell shock" by the Royal Army Medical Corps and was attributed to the exposure to explosives in the frontlines. The explanation for "shell shock" was in many ways similar to the "railway spine": the exposure to shock waves produced by the proximity to an explosion caused concussions and vascular disturbances, resulting in microscopic injuries and damage to histological structures in the brain and spinal cord. By then, most practitioners shifted their explanation of trauma

<sup>&</sup>lt;sup>11</sup>In fact, a meta-analysis of all trauma studies in North America indicates that only 20% of the persons who undergo a traumatic event do eventually develop PTSD (Yehuda & McFarlane, 1995).

<sup>&</sup>lt;sup>12</sup> For a detailed account on the history of trauma, see Young (1995), The origins of traumatic memory (Part 1). In *The Harmony of Illusions* (pp. 13–88). Princeton: Princeton University Press.

and attribution of causality from the railway to the battlefield.

During the Second World War, large numbers of US troops exposed to combat developed psychiatric symptoms classified under the general rubric of "war neuroses". Many of these cases were described and labelled as clinical syndromes based on symptoms: anxiety or conversion states, somatic regressions, psychosomatic disturbances and psychoses, etc. and later treated accordingly with a wide set of therapies similar to the techniques evolved in World War I: abreactive therapy, drug-induced sleep or convulsive shock therapy, psychotherapy, and occupational therapy (Young, 1995).

Current war trauma research is being undertaken not only by clinicians, psychologists and neuroscientists, but also by social scientists, such as political scientists, anthropologists, and historians. However, the vast majority of published studies focus on one possible main outcome of trauma: PTSD. The diagnostic category of PTSD was constructed in 1980 by the American Psychiatric Association in its third edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-III). The core set of disturbances and symptoms associated with PTSD are assumed to be caused by stressful experiences "outside the range of usual human experience" and connected with the Vietnam War as experienced by former combatants and patients of the US Veterans Administration. The diagnostic construct of PTSD is characterised by three main aspects (van der Kolk, 2000): (a) the repeated reliving of memories of the traumatic experience (intense sensory and visual memories and intrusive recollections of the event, accompanied by extreme distress); (b) avoidance of reminders of the trauma, including emotional numbing, detachment and withdrawal, associated with an inability to experience joy and pleasure; and (c) a pattern of increased arousal (hypervigilance, irritability, sleep disturbances, and an exaggerated startle response). In chronic forms of PTSD, the pattern of hyperarousal and avoidance may be the dominant clinical features.

In a recent article, van der Kolk (2000) argues that the DSM-IV Field Trial shows that the majority of people seeking treatment for trauma-related problems have histories of multiple traumas. These findings have lead to the delineation of a "new" syndrome. As part of this Field Trial, the PTSD task force "delineated a syndrome of psychological problems that have been shown to be frequently associated with histories of prolonged and severe interpersonal abuse" (van der Kolk, 2000). The syndrome, composed of a web of symptoms (alteration in regulation of affective impulses, problems in modulating anger, alterations in attention, self-perception and relationships with others, somatization, alterations in systems of meaning) in association with early

interpersonal trauma—has been called "Complex PTSD" or "Disorders of Extreme Stress Not Otherwise Specified" (DESNOS). The DSM-IV Field Trial found a high construct validity for DESNOS as a diagnostic category: the earlier the onset of trauma and the longer the duration, the more likely people would "make up the DESNOS diagnosis" (van der Kolk, 2000).

Since the early 1980s, trauma has emerged as a key heuristic concept in much of mental health research, from developmental effects of early trauma to personality disorders to psychosis. However, some authors have begun to seriously challenge psychological or psychiatric models that posit the existence of biological, psychological, and social mechanisms which are based on assumptions of universality of PTSD (Young, 1995, 2000; Summerfield, 1996, 1999). Trauma exposure and PTSD have been associated with worse physical health but the relative roles of trauma exposure, PTSD, and context are still contested (Gorst-Unsworth & Goldemberg, 1998; Friedman & Schnurr, 1995).

As proposed by Kirmayer (1996), trauma can be seen at once as a socio-political event, a psycho-physiological process, a physical and emotional experience, usually followed by an explanation and a narrative theme. From this perspective, it can be argued that war trauma cannot only be expressed on a political level but can also be verified at multiple levels of experience: physiological changes (e.g. increased catecholamine and cortisol production), the presence of physical injuries and disabilities, stunted growth (for instance, due to malnutrition), diverse psychosocial effects, and a wide range of co-morbid entities and disease conditions associated with trauma (e.g. substance abuse, tuberculosis, AIDS, etc.). The experience of war trauma is observed in the various degrees of residual symptomatology reported in affected individuals' narratives of suffering.

More recently, researchers have begun to explore how trauma is both a marker and product of social inequality and exclusion. Studies on narratives of distress have emphasized the taxonomies of stress, pain and suffering but have not sufficiently contributed to our understanding of interrelations between poverty and trauma as health determinants or to how culture models illness and healing traditions at the individual level (Waitzkin & Magaña, 1997). How is the social world connected to psycho-social-biological phenomena and the victims' narratives of pain and suffering? What are the processes by which poverty and trauma connect to the soma (the body-mind) and to the expression of emotions? What are the mediating phenomena in the construction of emotions and somatic symptoms? What magnitude of the complaints reported by patients are due to social exclusion, social and economic inequalities, and severe trauma experiences? What paradigms are available to help patients, families, and communities manage and cope with trauma-related conditions? What can a historical view tell us about the social construction of trauma and medical responses to extreme events and its consequences (Young, 1995, 2000)?

On the clinical and biomedical front of trauma research, there is a need to understand the relation between stress and traumatic stress better. These two sets of literature have evolved separately and very rarely intersect. The biology of trauma suggests that there may not necessarily be a continuum of response (or symptoms) between stress and traumatic stress. The neurobiology of PTSD provides evidence that PTSD is biologically different from other traumatic (and nontraumatic) stress responses. A recent review of the neurobiology of PTSD (Vedantham, Brunet, Neylan, Weiss & Marmar, 2000) point at three important research findings: noradrenergic axis changes, neuroendocrine changes involving the hypothalamic-pituitaryadrenocortical (HPA) axis, and neuroanatomic changes involving the hippocampus.

In addition to noradrenergic changes, the exposure to acute stress brings out neuroendocrine changes modulated by the HPA axis: release of corticotropin-releasing hormone stimulates adrenocorticotropic hormone, which in turn stimulates cortisol (a primary stress hormone) secretion. Cortisol activates a cascade of physiologic stress-related responses. In chronic (nontraumatic) stress HPA axis patterns seem to behave differently (as shown by lower urinary cortisol levels in veteran PTSD inpatients). In animals exposed to stressors of disrupted attachment, researchers have found damaged cells in the hippocampal region of the brain (also measured by hippocampal volume) similar to the damage induced by glucocorticoids directly implanted in the hippocampus. This preliminary evidence of changes in the hippocampal volumes (as measured by magnetic resonance imaging in combat veterans and healthy controls) suggests that changes in size and function of the hippocampus may be an important feature of chronic PTSD (Vedantham et al., 2000).

From a clinical perspective, the diagnostic construct of PTSD—primarily based on the experience of war veterans and victims of other types of trauma (rape, criminal assaults, torture, accidents and natural disasters)—has advanced our understanding of the disease experience of individuals who have suffered single incident traumas (e.g. motor vehicle accident). However, these persons most often display a variety of complaints and psychological problems (e.g. somatization, depression, amnesia and dissociation, etc.) only some of which fall under the strict definition of PTSD.

The PTSD model has 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. It has been suggested that in non-Western populations, 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, 1993, 1995; Summerfield, 1995; Kirmayer, 1996).

From an epidemiological perspective, the magnitude and distribution of trauma-related disorders as a collective experience in local populations exposed to political violence and contemporary wars is far from being understood. There are few and random findings, undeveloped frames for analysis and an overall lack of hypotheses on basic issues about how people experience and are affected by political violence, ethnic conflict, and wars. The preliminary results of a recent field study in the Peruvian highlands, which included a cross-sectional survey conducted among the general population of an area highly exposed to traumatic events—over a decade of extreme violence, terrorism and atrocities—show a large proportion of the adult population (over 50%) scoring positive for symptoms of mental distress and about one in four adults (over 14 years old) interviewed as symptomatic for PTSD. Clearly, widows or single mothers and the elderly are the most affected, not only by the long-term effects of exposure to traumatic events, but also indirectly by the disruption of social networks. low social cohesion and relative isolation from their peers, lack of food and shelter, and other conditions generally related to an overall deterioration of the local economy and extreme poverty (Pedersen, Gamarra, Planas & Errázuriz, 2001).

At the same time, we should emphasize that migrants and refugees exhibit various forms of resilience and survival strategies to cope with trauma and overcome adversity (Rousseau et al., 1998, 1999). Cultures of terror and resistance come in many forms, and research initiatives should help to "unlock the meaning" of violence and conflict and explain both the negative (i.e. illness) and positive (i.e. resilience) health outcomes of trauma. As has been shown, cultural differences, social structures, and coping behaviours may significantly influence the onset, course, severity and psychosocial outcomes of trauma, which is why there is an urgent need for studies in this area among different cultural groups, particularly in low-income countries of Asia, Africa, and Latin America (De Girolamo & McFarlane, 1996).

Poverty, social suffering, and the humanitarian responses to war trauma

When trying to explain disease occurrence, distress, and social suffering in relation to contemporary wars and atrocities, the issues of poverty and social

inequalities cannot be ignored. In referring to the issue of infections and inequalities, Farmer (1999) argues that scholars often make "immodest claims of causality" with regards to the distribution and course of diseases "which are biological in their expression but are largely socially determined"—"immodest" because these claims are often wrong and misleading and divert attention from the preventable social origins of disease. He further argues that critical perspectives of disease occurrence should question "...how large scale social forces come to have their effect on unequally positioned individuals in increasingly interconnected populations" (Farmer, 1999).

In the last decade, political violence has emerged as an important issue at the forefront of public health concerns (see Zwi & Ugalde, 1991). Public health has since its inception stressed the social and ecological determinants of health, providing a specific model for linking the context (ecological, economic, political, social, and cultural) in which communities, families, and persons live with the differential distribution of health outcomes, both at the individual and collective levels. However, most community based studies (particularly epidemiological surveys) still produce probabilistic relationships between variables, such as exposure to violence and health outcomes, while generally bracketing many elements that are part of the macroscopic context and marginalizing the subjective experience and distress of individuals and the larger group.

Critical social scientists believe that not being explicit about the social, political, and economic sources of inequality contributes to an inadequate reading of the context in which suffering and disease are produced (Heggenhougen, 2000). The neglect of the social origins of pain and suffering often results in immodest claims of causality, in the medicalization of social problems and ultimately leads to the maintenance of social inequalities. As a counter-position to the emphasis placed on "neutrality" and "objectivity" in the sciences, some health and social scientists insist on social injustice as the key factor in the production of distress, disease, and suffering. While functionalist models still view society as being held together by common values and institutions, critical social sciences see social organizations in human groups as the historical results of socio-economic relations and as stemming from the disproportionate power exerted by certain groups over others.

Critical theories consider that all social arrangements have political and economic bases and that health scientists have to analyse situations of suffering and pain resulting from such factors as class, gender, and race. In this approach, understanding conflictual situations serves as the main entry into deconstructing the different processes at work in societies exposed to political violence, ethnic conflict and wars. More recently, such research has focussed less on formal class struggle and

other divisions, emphasizing instead the implications of Foucault's insight that power in society relies not only on control, repression and submission of others but also expresses itself—perhaps primarily—in its ability to define what is acceptable, appropriate, and ultimately normal.

Current crises, from Kosovo to Rwanda, highlight the prominent place of political violence, ethnic conflict, and war in contemporary societies. Social responses to these traumatic experiences "...often transform the local idioms of victims into universal professional languages of complaint and restitution," which are appropriated by popular culture and humanitarian institutions for political and moral purposes (Kleinman, Das, & Lock, 1997). The medicalization of social responses to collective suffering and the routine provision of "trauma counselling" in such circumstances reflects a poor understanding of the relationships among critically important social determinants and the range of possible health outcomes. Indeed, the experience of trauma, war, and loss cannot only result in negative outcomes but also play a critical role in mobilizing social cohesion and demonstrating the capacity for resistance as well as resilience of individuals and communities (Zarowsky & Pedersen, 2000).

There is now a wide repertoire of therapies to deal with trauma-related disorders ranging from trauma counselling, psycho-dynamic and cathartic approaches, psychodrama, cognitive-behavioural techniques (exposure therapy, imaginal flooding, systematic desensitisation, etc.) (Scurfield, 1985) to techniques derived from eastern traditions aimed at achieving transcendence and relieving distress (Kapur, 1997) to the use of psychopharmacological agents, such as tricyclic anti-depressants, monoamine oxidase inhibitors, serotonin reuptake inhibitors and mood stabilisers. While it is possible that PTSD (non-combat-related) patients might be responsive to medication, the complete remission of symptoms may be an unattainable treatment goal (Marshall, Davidson, & Yehuda, 1998). Despite claims to the contrary, there seems to be insufficient evidence supporting the universal effectiveness of these therapies (psychosocial and pharmacological), including no treatment at all (Mollica, 1988). There seems to be no firm evidence that trauma counselling and debriefing effectively works and that clinical interventions delivered by humanitarian agencies provides something more valuable than what can be obtained from the personal social support networks (Raphael, Meldrum, & McFarlane, 1995). No independent evaluation has been conducted of the outputs and outcomes of traumacounselling programs in war zones, which are wellintentioned but often driven by Western assumptions based on an oversimplification of the medical model.

Summerfield (1998) stated that: "The effects of war cannot be separated off from those of other forces:

throughout the western world, structural poverty and injustice, falling commodity prices, unbridled environmental exploitation and landlessness are all linked to a withering away of traditional self-sufficient ways of life. (...) Imposed structural adjustment packages reflecting Western neoliberal economic orthodoxy mean slashed budgets for health, education and social welfare (but not arms) on which the poorest depend. This may undermine the social fabric no less effectively than the wars there have done."

Finally, most ongoing efforts and interventions carried out by official and non-governmental agencies for improving living conditions in post-conflict situations, while promoting the re-settlement of displaced populations, have been limited to conventional aid packages, often following the "natural disaster model" of relief and humanitarian assistance. In most cases relief operations include distribution of basic food items, portable stoves, tin roofs, blankets and some form of medical assistance. Most of these interventions have not been assessed in terms of health outcomes and overall impact on the life and well-being of local communities but one can assume that the medium and long-term sequelae of traumatic experiences are neglected or simply ignored.

#### Concluding remarks

How, then, might clinical and epidemiological research and clinical practice arising out of psychiatric models speak to the social, political, cultural, and economic dimensions of the experience of trauma? How might prevailing models of war trauma be influenced by social sciences' knowledge, especially with respect to different cultural and social systems? How might we link research exploring the ways in which individual experience over the life course becomes biologically embedded with the more social and political perspectives emphasized in this essay and vice versa? What are the implications at various levels—from neuroendocrine structures to Third World refugees to economic or human rights or health policy—of the different approaches to trauma?

Some of the approaches discussed above have been criticized by other social scientists for paying insufficient attention to the lived experience of distress and suffering. In order to recapture this experiential dimension while avoiding the highly individualised perspectives of psychology and psychiatry (which were seen as contributing to maintain structural inequalities by their silence on political, cultural, and social issues and on power in general), the notion of *social suffering* has been put forward. The notion of suffering evokes an assemblage of human problems that have their origins and consequences in the devastating injuries that the

existing social order of the world inflicts, in variable degrees according to local situations, on the experience of individuals up to entire communities and nations. Kleinman et al. (1997) have defined it as follows: "Social suffering results from what political, economic, and institutional power does to people and, reciprocally, from how these forms of power themselves influence responses to social problems. Included under the category of social suffering are conditions that are usually divided among separate fields, conditions that simultaneously involve health, welfare, legal, moral and religious issues. (...) For example, the trauma, pain, and disorders to which atrocity gives rise are health conditions; yet they are also political and cultural matters. Similarly, poverty is the major risk factor for ill health and death; yet this is only another way of saving that health is a social indicator and indeed a social process" (Kleinman et al., 1997).

The notion of suffering carries the idea that it is essential to address both individual and collective levels of analysis; personal experience and politico-economic context; local problems and their relation to global issues; community grounded solutions and professional responses; health problems and social problems (Farmer, 1996). This perspective holds that the significance of the inter-linkages between these various domains is generally underestimated. It stresses the need for a clearer understanding of the ways in which macro-social dimensions interact with the micro-social (the community, the family and the person) in attempting to explain both the construction of suffering and its opposite, the production of health.

Finally, critical social sciences insist that knowledge production is never neutral, that there is no such thing as a "mere fact" and that scholars and researchers themselves are inevitably linked to a particular social group and are working within a given social and cultural context (Bibeau, 1999). While critical theory and the social suffering perspective serve as an important and productive counterpoint to the neutrality of orthodox "normal" science and public health, these views must themselves be subjected to the same scrutiny that they bring to bear on medicine and science, including the criticism that they themselves silence dissent—in this case through claiming a morally rather than scientifically unassailable position. Two implicit questions emerging from this discussion are: Why do scientists privilege certain explanatory models of trauma while ignoring others and why do we base our humanitarian interventions and healing strategies in Third World countries on a set of western assumptions?

Social epidemiology and critical social theory converge in arguing that structural inequalities are the most important determinants of population health. Interpretive anthropology and cultural psychiatry insist on the importance of narrative and lived experience. In

assessing and reacting to trauma-related conditions, it is crucially important to not only focus on the narratives of trauma and the meaning of the illness experience but also to understand and act on the social and political determinants of health and human suffering, while staying aware of the particular stakes and interests of a given perspective and of the great cultural diversity of individual and collective coping responses.

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