Chapter 8
Health, Human Security and the Peace-building Process

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1. Introduction

> Humanitarian assistance, health leaders, and health personnel are in the unique position to be able to leverage something universally important, irrespective of the details of any given conflict: The promise of good health. This makes the international health community a potentially powerful force in peace efforts throughout the world.[1]

Human security and health are linked. One link is the effects of violence and conflict on both an individual's health and the overall health care system. Violence and conflict often leads to a collapse in the health care system, furthering jeopardizing the health security of those people caught in the middle of the conflict. Appropriate health interventions can increase the level of human security in a conflict situation and provide a vital link to the beginning of the large societal peace-building process.

Human Security

There are two predominant concepts underlying human security. They include the sustainable access to basic human needs and the guarantee of freedom or human rights. The Independent Commission on Human Security defines human security as the protections of "the vital core of all human lives in ways that enhance human freedoms and human fulfillment."[2] More broadly, human security is based on protection and empowerment.

Human security involves protecting human freedoms such as freedom from want, freedom from harm, freedom from fear, and the freedom to take action on one's own behalf; freedoms without which empowerment would not be possible.[3] Empowerment means ensuring the continued existence or creation of systems that give people the building blocks of survival, dignity and livelihood. Challenges to human security arise from threats to freedom and empowerment such as poverty robbing people of choices and mobility, violence endangering bodily safety, and disease creating fear and disability or even death.

Often, these challenges are ensured through the strengthening of civilian police and demobilizing combatants; meeting immediate needs of displaced people; launching reconstruction and development; promoting reconciliation and coexistence; advancing effective governance; and providing health intervention. In most cases, human security complements national security by focusing on internal threats that may weaken the nation as a whole whether economic, violent, or epidemic; threats that are often overlooked in national security but are at the core of human security.

Health

The World Health Organization's constitution defines health as "a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity." Using this definition, the notions embedded within human security - sustainable access to essential needs and respect for certain rights - are necessary but not sufficient conditions for health.[4]

Peace-building

Peace-building is a broadly used term that is often ill-defined. It gained widespread use after 1992 when Boutros Boutros-Ghali, then United Nations Secretary-General, announced his *Agenda for Peace*.[5]

In reality, the term peace-building is often lost in similar but better-established terms whose juxtaposed meanings may help explain peace-building. Peacemaking, for example, is the mid-conflict process of bringing hostile parties to agreement through peaceful means. Peacekeeping, on the other hand, involves post-conflict interventions by the UN or other legitimate third party that are aimed at bringing stability to areas of

tension. Both peacemaking and peacekeeping are required to halt conflicts and preserve peace once it is attained. Preventative diplomacy is the attempt at diffusing or resolving a dispute before it turns into violence. While maintaining temporal distinctions between the terms, peace-building may be seen as the final post-conflict step in attaining peace. Peace-building efforts are aimed at avoiding a relapse into conflict by identifying and encouraging institutions that strengthen and solidify the peace. In other words, peace-building is not possible without first observing successful peacemaking and peacekeeping efforts.[6]

Peace-building efforts may take the form of cooperative projects which link two or more countries in a mutually beneficial undertaking that can not only contribute to economic and social development but also enhance the confidence that is so fundamental to peace.[7] These projects would normally focus on three main components of peace-building: the strengthening of political institutions, the reformation of internal and external security arrangements, and revitalizing the economy. However, strong pressure on fixing inequalities through programs and policy in a conflict zone should be included as group inequalities are strong root causes of conflict.

A common approach to the peace-building process in a post-conflict society is the use of disarmament, demobilization and reintegration (DDR) programs. These programs are normally a combination of efforts by national governments, international organizations (usually the United Nations), local NGOs and donors to reintegrate ex-combatants into civilian life and reunite communities. DDR programs seek to create safe environments, enable people to earn an adequate living through constructive means, and assist in the community reconciliation process.[8]

Disarmament, as defined by the United Nations, is “the collection of small arms and light and heavy weapons within a conflict zone.” Disarmament usually entails the use of incentives, often monetary, to encourage the giving up of weapons. At this stage in the program, ex-combatants are typically given food aid, clothing shelter, medical attention, and are taught basic skills.[9]

Demobilization is the formal disbanding of military formations. It involves grouping ex-combatants in a neutral area and putting them through orientation programs that offer skills training as a means of obtaining income as opposed to fighting.[10]

The goal of reintegration is to assist ex-combatants transition into civilian life.

Cash allowances, household goods, land, farm equipment, and housing materials are provided in order to address the most immediate needs of ex-combatants.[11]

While DDR is a necessary component of peace-building, it alone is not sufficient to ensure a stable post-conflict society and to prevent failed states from relapsing into violence.[12] To be sustainable, DDR efforts need to go beyond free hand-outs and short-term job training. Ex-combatants need a channel through which they can feel solidarity with their fellow community members.[13] The community needs a goal towards which all individuals are interested in obtaining.[14] Public health can meet that need. Health is important to all members of a community. By working together towards good health, community members can learn the long-term skills necessary for successful community reconciliation.

2. Health and human security are linked

Human security is obviously linked to protection from violence and the guarantee of basic freedoms. Consequently, it is tempting to believe that protecting human security is best left to police or military forces, even though substantial evidence indicates that public health approaches are also vitally important in preventing violence.[15] Moreover, evidence is showing that nurturing good health is also inextricably tied to the pursuit of human security,[16] proving the necessity of a host of other factors and groups that can and do play a vital role in attaining human security.

Poor health can be as devastating within a society as war, taking away from people their ability to exercise choice, take advantage of social opportunities and plan for their future. In fact, the importance of maintaining the good health of population has at times taken priority over war as is evidenced by the fact that cease-fires have been called in order to allow for the immunization of children during times of conflict.

Human security is mainly comprised of three challenges in which health and the security of good health are intricately linked: violence and conflict, global infectious disease, and poverty and inequity.[17] As this chapter focuses on the link between health and violence, it is helpful to note that more broadly, at the center of upholding human security is indeed the protection of human life. When the core of human life is weakened, whether by illness, disability, or avoidable death, poor health becomes a

critical threat to human security. Since human security is largely based on the welfare of human life, and the welfare of human life is dependant on maintaining good health, human security cannot be divorced from the crucial role that health plays in a society. And yet, settling on a standard for good health is difficult anytime we attempt to move beyond the mere absence of disease. Within the scope of good health as defined by the WHO is “a state of complete physical, mental, and social well-being,” all of which is harder to translate into concrete human health terms than the absolute positive or negative presence of disease.

A standard could be established at a point at which health no longer inhibits the ability of a society to function freely and allows it to advance in a manner of its choosing. More accurately, good health can be seen as a precondition for social stability. If a society's stability is jeopardised because of health conditions within it's population it is indicative of an absence of health among an important part of the population. This is both important and plausible when we consider that current health problems can have long-term and wide-spread effects on the stability of more than the immediately affected population. Sickness and health can expand beyond the time and zone of origin and the scale of death due to health can escalate dramatically through ripple effects, extended in time into neighbouring regions. For example, in some African nations, the population of teachers has been devastated by the outbreak of AIDS which has in turn eroded the ability of those nations to secure effective levels of education. In such situations, there are important long term impacts that arise through the indirect effects of disease. A similar logic holds for health outcomes such as HIV-related deaths or those from violent injury tending to be concentrated within the young adult population - a subset of the population which is vital to the economic security of their dependants and their own societies.

Beyond the obvious link between securing health in order to protect human security is the way health security promotes concepts essential to human security. Both health and human security depend on access to knowledge.[18] Knowledge not only allows scientists and governments to detect arising problems, but it also serves as an intellectual resource and as the base necessary for the advancement of vaccines and drugs that promise to be the solution to those problems. Furthermore, such a knowledge base allows a society's public to be educated on sanitary health practices, the availability

of health services, and the means in which to participate in the decision-making behind the protection of their own health whether by democracy or by adopting certain behaviors at home. However, the entire process, while promoting social stability, needs a certain level of prior stability in order to be effective. A society may be driven to promote its own health, but will only go so far as the capacities afforded by knowledge that is readily available to that society. Health-based information, data and analyses of disease risks and spread not only need to be available, but should be promoted to achieve health and human security. This can only be possible in a society that places little or no barriers to the dissemination of information. In this sense, the role of the information media is growing in educating and engaging the public.

Health is also advanced by social arrangements such as health care systems, local health groups, and civic engagement, the most important of which is the state's assumption of responsibility and authority for the health of its citizens. Ensuring the health security of the public is, like police, fire protection and education, an indivisible good, with strong multiplier effects. Improvements in health anywhere benefit everyone everywhere. Protecting the health of the public - locally, nationally, globally - is thus a core public good and a critical social arrangement for producing health and human security.

Reducing health threats to human security, however, will require unprecedented cooperation among diverse actors and nation states. Good health and human security for all depend on the productive stability provided through peace and development - to ensure universal access to the basic requirements of food, nutrition, clean drinking water, hygiene and sanitation, and housing. Peace reduces the threat of violent conflict, and conversely, experience of violent conflict, even in a neighbouring country predicts more violent conflict.[19] When basic conditions of peace and development are achieved, good health can be attained as part of human security.

Health as a Global Public Good

More often than not, health is seen as a public good, whose attainment depends not just on domestic policies, but on international cooperation. Even those who do not see good health as a global public good, will concede that public health is.[20] To understand how public health is a public good requires breaking the concept into pieces. A ‘good’ can

broadly be seen as a product, program, activity, or service. To be a public good, the good must be non-rivalrous and non-exclusive.[21] A non-rivalrous good does not costs more to give it to additional people and the use of it by additional people does not diminish the use of it by others. Non-exclusive goods are goods that people cannot be prevented from using.

An illustrative example of a non-rivalrous and non-exclusive good is a lighthouse.[22] Once a lighthouse is built, it does not cost more to allow additional people to use it, and use of it by one person does not diminish the usefulness of it by others. It is also impossible to prevent one person from using a lighthouse while it is on for others to use. To be a global public good, the good must exhibit significant cross-border externalities. Externalities occur when one nation takes an action but does not bear the full cost or benefits of that action.[23] Therefore, to Global Public Goods are considered to be goods characterised by a significant degree of publicness (non-excludability and non-rivalry) that crosses national boundaries.[24]

Health in itself does not qualify as a public good, either individually or nationally. A person's or a country's particularly health status is a private good in that he/she (or it) benefits primarily from it.[25] For public health activities to be considered as global public goods they must involve cross-country externalities and publicness. Take for example a global infectious disease eradication campaign. If the goal of the campaign is to completely eradicate a disease, it does not cost more for additional people to benefit from it, and all benefit from it once eradication is achieved. And it is impossible to exclude any individual from the benefits of not being at risk of becoming infected. A broad range of potential global public goods for health exist. These can be classified as follows:

- Knowledge and technologies, which can be defined, for example, as an understanding of health risks; preventive, diagnostic, curative and palliative interventions, and delivery systems;
- Policy and regulatory regimes, for example, international norms and standards, and treaties;
- Support for the health system in countries where it is currently ineffective or inaccessible.[26]

Along those lines, control of violence and war is also a global public good since everyone benefits once peace is achieved and you cannot exclude someone from reaping the benefits associated with the end of a violent situation. It is easy to see how the effects of violence are global and do not stop at the borders of a conflict. The effects can be felt in a far away country that agrees to resettle displaced families, not knowing, for example, that some have acquired TB in a hastily set up refugee camp and will now pass the disease on to others. Countries that border conflict zones may also feel the effects of violence if their economy suffers because it relied on the exportation of goods to a country that spends all of its money on weapons.

3. Effects of Globalization on Collective Violence

Globalization has been defined as a set of processes that intensify human interaction by eroding boundaries of time, space, and ideas that have historically separated people and nations in a number of spheres of action, including economic, health and environmental, social and cultural, knowledge and technology, and political and institutional.[27] The interaction of the processes of globalization and the international system is changing the face of the international security discourse.

Health development in the 21st century must take advantage of the opportunities afforded by global change and at the same time, minimize the risks and threats associated with globalization, such as the negative effects of violence. Negative changes are associated with both collective and interpersonal violence and exemplify a downside human security risk that may be substantially greater in population impact than would have been observed in a less globalized world.

At the end of the Cold War era brought relatively and far-reaching consequences to the political and social structures of the former Soviet bloc, as well as radical changes affecting livelihood strategies.[28] Comparison of regional trends in youth homicide between western Europe and the former Soviet Bloc from 1985 to 1995 illustrates some of the associated changes in interpersonal violence that were observed during this period. Homicide rates in the 10 to 24 age bracket increased by over 150% from 1985 to 1994 in the Russian Federation, and by 125% in the same period in Latvia.[29] Moreover financial factors related to globalization may also contribute to changes in levels of

violence. With respect to collective violence, there is little doubt that economic motivations have played a major role in initiating conflicts, and that access to global markets and trade in commodities from conflict areas has played a substantial role in maintaining the ability of parties to the conflict to continue their struggle. Another aspect of globalization that is associated with both collective and interpersonal violence is the issue of transnational flows, over increasingly porous borders, of weapons, particularly small arms.[30]

The resulting disparities and the emergence of concomitant clusters of intense violence within nations enhances the probability of state collapse and disintegration, and the emergence failed states. Collapsed states often pose a direct threat to their citizens or fail to protect them. Failed states and the ensuing random violence, both local and transnational, that results from such collapse set off waves of domestic and transnational catastrophes such as migration, epidemics of communicable disease, undernutrition and malnutrition, and rape and unsafe sex.[31]

Therefore, in today's globalizing world, countries are increasingly interdependent and thus more vulnerable to health problems that originate outside of their borders.[32] Yet it is also globalization that can help promotes global health objectives. Building international research networks for health, supporting international public-private partnership to create new lines of drugs and vaccines, banning together to eradicate diseases, taking part in international treaties that govern the movement of people, animals, and foodstuff are all ways that countries can use globalization to promote public health.[33] In this respect, linking to the analysis in the previous section, global public goods are important because their adequate provision is crucial for the management of the process of globalization.[34] It is within this context that this chapter has stressed the important role of public health knowledge and prevention as an important tool to manage the collective violence threats of a more interdependent and globalized world.

4. Effects of Violence on Health

Violence and conflict can have both direct and indirect effects on health and human security. Violence has been defined by the WHO in the recent publication *World report*

on violence and health.[35] Collective violence is a form of violence often associated with situations in which human security is said to be threatened. The World Health Organization defines collective violence as "the instrumental use of violence by people who identify themselves as members of a group - whether this group is transitory or has a more permanent identity - against another group or set of individuals, in order to achieve political, economic or social objectives."[36] Recognised forms of collective violence include wars, terrorism, violent political conflicts occurring within or between states, state-perpetuated violence (genocide, repression, disappearances, torture, human rights violations), and organized violent crimes (banditry and gang warfare).[37]

It should be apparent that direct health effects related to collective violence take the form of weapon-related injury or death.[38] The World Health Report 2001 estimated that conflicts accounted for over 310,000 deaths during 2000.[39] On the other hand, the indirect effects of collective violence and conflict are felt on a more long-term[40] and far-reaching scale, and include health conditions arising from population displacement, and destruction of health facility infrastructure among other factors.[41] As opposed to direct effects, which much more frequently involve combatants, indirect health effects of collective violence disproportionately affect non-combatant populations.

Population displacement as a factor in undermining a population's health and human security deserves further comment. Populations displaced from their homes due to conflict are subject to a variety of health risks they might not ordinarily face. Displaced populations fleeing collective violence have a crude mortality rate above baseline rates,[42] with the primary causes of death being communicable diseases and malnutrition. In this respect, over the last 20 years crude mortality rates (CMRs) 30-fold higher than baseline rates have not been unusual. Furthermore, daily CMRs amongst Rwandan refugees have ranged between 25 and 50 per 10,000 per day.[43] An estimated 25 million people from 47 countries were internally displaced in 2002 due to armed conflict, generalised violence and human rights abuse. The fact that they are displaced brings with it the very real potential of lack of access to food, clean water, proper sanitation, and possibilities of providing economic security for themselves. Malnutrition, overcrowding, and lack of sanitation frequently combine to facilitate the emergence of epidemics of transmissible disease in such populations, and children and the elderly are the ones most susceptible to death from such causes. Diarrheal diseases, acute

respiratory infections, measles, and other infectious diseases are the most common causes of death among refugee and displaced populations.[44]

Collective violence can also cause the existing health care system to deteriorate at a time when the medical needs of a population are increasing. Health care facilities are often destroyed, leaving no places for people to seek treatment. Governments spend more money on fighting and so less money is invested in health services and thus the infrastructure deteriorates.[45] Medical supplies and equipment become scarce and skilled doctors and nurses flee to more stable areas. Routine and rudimentary procedures, like immunizations are ignored so the spread of communicable disease such as measles becomes more widespread.

War and conflict can lead to reduced food production and limited or no access to food for many people, with the most serious impact on the poorest households. Food insecurity in situations of conflict can also be seen in the use of hunger as a weapon if food supplies are seized, cut-off, if food aid is diverted, or if crops, water supplies, livestock and land are intentionally destroyed.

A decline in agricultural output, due to a decrease in production or to the use as hunger as a weapon, can negatively impact the nutritional status of a population, thus affecting their health. Without access to a proper diet, people become more susceptible to disease and epidemics. Unreliability of transportation services can contribute to food insecurity as can a lack of commerce.[46] In periods of conflict, money is often scarce because the institutions that hold it - banks or post officer for example, can close and people can not access money to buy necessary goods.[47] Without reliable transportation or road security, even goods and food supplies that are available tend to be extremely expensive and inconsistent.[48] Displaced populations lack even the ability to barter or trade household goods or cattle that they may have relied upon when faced with a food shortage.[49]

5. Health Interventions Can Increase Human Security

Health interventions have the potential to play an integral role in the peace-building process[50] and can increase the level of human security in a conflict situation. The health sector can create a bridge of peace between the conflicting parties using the promise of

good health as a common goal. Working toward the goal of good health can also serve as the basis for continued cooperation from both sides. In addition, the involvement of health professionals from different sides of a conflict can be a model for other sectors affected by conflict and can create the long-term community involvement that is essential for sustainable peace.

In the fragile transitional phase from conflict to peace, the health sector can promote a concerted effort to help overcome the enduring physical and psychological trauma, encourage community reconciliation, and help prevent renewed outbreaks of violence. Once the fighting has ceased and the peace-building has process begun, the health sector has the chance to reform and/or change past systems and structures, which may have originally contributed to the economic and social inequities that caused the conflict.[51]

Health-Peace Initiatives

Health programs that integrate peace work into their health goals can be roughly grouped together as Health-Peace Initiatives (HPI). HPIs are any initiatives that intend to improve the health of people and that simultaneously heighten that group's level of peace, whether this peace is internal to the group or between the group and one of more other groups.[52]

HPIs can be divided by mode of operation into nine main categories.

(1) *Communication of knowledge*: by using the health infrastructure and their specialized training and skills, health workers have the ability to discover and disseminate crucial facts about conflict that may be difficult for others to obtain.[53]

(2) *Evocation and broadening of altruism*: In a conflict situation, it is easier to partake in the violence when the people you are fighting against have been depersonalized. By not seeing them as people, they are easier to kill. Health workers are in a position to counter this effect by personalizing both sides of the conflict. In addition to helping to prevent, restrict, and terminate wars, personalizing can make the task of reconstituting healthy communities easier after they end.[54]

(3) *Construction of superordinate goals*: Health workers can help develop goals that transcend the immediate interest of warring parties. To bring both parties into a more peaceful relationship, these goals would have to be valued in the long term by both

sides.[55]

(4) *Extension of solidarity*: Health workers can serve as a link outside of the immediate conflict situation for those who are struggling to prevent or curtail war, making it easier to survive it. Additionally, the vigilant presence and backing of an international community of health workers may help protect the existing medical infrastructure.[56]

(5) *Strengthening of communities*: A health care system that is equally accessible to all members of society can foster a feeling of belonging to a broader, more inclusive group that makes hate-based mobilization of ethnic or other in-groups more difficult.[57]

(6) *Psychological healing of individual society*: In a post-conflict society, the work of prejudice reduction, protection of human rights, building of knowledge and skills in nonviolent conflict resolution, and strengthening of diverse groups living together cooperatively must be carried out in many sectors of society, including health.[58]

(7) *Non-cooperation and dissent*: health workers can choose not to cooperate with programs that are not in line with established medical goals. They can also speak out against programs, boycott companies, and testify as to the atrocities of war.[59]

(8) *Diplomacy*: Health officials are often well placed to engage in diplomatic activities. They can have access to the officials in high political offices while also having high credibility with the general public.[60]

(9) *Redefinition of the situation*: Health workers can redefine the situation as involving public health issues thus justifying, and even necessitating their individual and collective involvement in the issue.[61]

Health-Peace Initiatives in Action

"Health as a Bridge for Peace" was developed by the ministries of health of Central America during the 1980's, with support from the Pan American Health Organization (PAHO). It noted that the Ministries of Health of Central America and Panama had met together for 30 consecutive years so health cooperation must be the most resilient form of exchange among governments of the region.[62] Health as a Bridge for Peace was created with the intention of integrating conflict management and community reconciliation into a program of co-operative health care delivery.[63] It has succeeded in bridging some gaps between opposing parties that no other entity or group had been

able to achieve.[64]

UNICEF used the delivery of health care as the basis for cooperation between conflicting parties in both their cease-fire for immunizations and "corridor of peace" campaigns. In 1985 UNICEF pioneered the use of humanitarian cease-fires for pediatric immunizations. The success of this program led to a repeat in Lebanon in 1987. In 1985, UNICEF again merged peace work with the delivery of health care in the negotiation of a "corridor of peace" between the government and the NRA in Uganda to safely transport medical supplies and vaccines. A similar agreement was reached and a "corridor of peace" arranged between the government and the Sudan People's Liberation Army in 1989. This corridor allowed relief supplies to be delivered in southern Sudan.[65]

The WHO, inspired by UNICEF's success in cease-fire arrangements, arranged a similar program in Afghanistan in 1994. There, two weeks of peace turned into a two-month cease-fire during which a mass immunization campaign was carried out. In addition to immunizing children, this campaign got the Afghan people talking about co-operation rather than confrontation.[66]

Also organized by the WHO, was a research and action program that sought to combine peace-building with health-related initiatives. This program, Health and Development for Displaced Populations (Hedip) conducted three programs in Croatia, Mozambique and Sri Lanka from 1991-1995. Hedip programs focused on health issues whose solutions relied on the integration of the health sector with other sectors, thus using health-related actions to promote community reconciliation.[67]

The Hedip program in Mozambique brought conflicting parties together for dialogue using basic health issues. A committee to co-ordinate health outreach activities was formed that included representatives from the district government, religious organizations, local NGOs, and the traditional leadership system. By focusing this committee's attention on a common interest in primary health care, the Hedip program was able to start the process of opposing parties working together for community reconciliation.

6. The Role of the Health Worker in the Peace-building Process

Another way that health can contribute to human security is through the unique position of health care providers. Health care professionals not only have a special role to play in healing violence-ravaged communities, but they are well educated, and have access to a wide range of community groups.[68] Although the role of not-for-profit health workers could be compromised through indiscriminate participation, they hold several characteristics and abilities that give them an opportunity to advance the goals of human security and engage in the peace process in ways that are closed off to other groups or individuals.

A core value for the majority of health care providers, particularly in humanitarian aid agencies, is an ideological sense of altruism that serves as the foundation of medicine, medical education, and health care policy.[69] This characteristic guides their goals and is easily acknowledged and even applauded in most societies, which puts health care workers in a unique position of trust amongst those societies. Moreover, the aim of their work is unbiased and usually in the interest of all groups. This gives health care providers a great deal of legitimacy in their endeavors especially because they are consistently considered members of a very ethical and honest profession.

Health care goals are usually beneficial to both sides of opposing forces as in the case of pediatric immunizations that were possible because of specially arranged cease-fires in El Salvador, Lebanon, and Afghanistan. Again, this may grant health care workers rare access to both sides of opponents due to the unbiased nature of their work. In a more extreme case, an armed group will choose not to shoot at doctors healing their enemies because those doctors are equally obliged if not willing to treat them.

This neutrality exists in policy and politics as much as in warfare. Since medicine is rooted in scientific inquiry with a high regard for empirical reasoning[70] the objectivity of health care professionals prevents them from being seen as sources of propaganda or the agents of an opposing position.[71] This merited reputation not only gives physicians and medical researchers power in public discourse and publications, but it also allows them to be acknowledged as credible sources of information from where ethnic prejudices may be debunked and human rights abuses may be challenged. In fact, health care providers and researchers hold more credibility than politicians amongst most societies.[72]

Besides providing an unbiased opinion and neutral health care in areas of conflict,

health-based aid agents also provide a wide array of services that are beneficial to the procurement of human security. For example, health officials and health-based aid agencies can investigate the conditions of hospitals, medical clinics, sanitation facilities, and other health-related infrastructure in areas of conflict.

Additionally, health care providers are especially trained and able to gather information at the core of human security. Data on victims of alleged human rights abuse; epidemiological surveys on refugees, displaced persons, or forcibly deported people; and statistics on the effects and numbers of those denied access to medical care, food, or drinking water are all obtained through the expertise of medical researchers and physicians. Such information is also analyzed by them yielding both real and potential consequences on a society as a whole or its threat to human security.

What may be more interesting to modern-day governments in light of the war on terrorism is the documentation that is being provided by medical researchers of the health effects of indiscriminate weapons of mass destruction such as land mines, incendiary weapons, poison gas, and biological warfare, including their effects on noncombatant civilians. Not only does the documentation provide governments with credible information about its dangers and consequences, but it gives nations-states legitimate political ammunition or leverage in pressuring other nations to abandon its use.

Since health concerns can quickly become internationalized, governments and global agencies must also rely on medical researchers or health aid workers to provide information and other analysis that concerns human security from regions or areas that are normally politically “closed.” Such surveys and analysis may include the spread and effects of an epidemic, the civilian impact of infrastructure destruction, loss of medical care, and long-term health effects of conflict and economic sanctions.[73]

Although health care providers definitely have an important role to play in peace-building by attaining useful knowledge and generally aiding in the pursuit of human security through their unique access to groups, their participation could also have negative consequences.[74] For example, a humanitarian cease-fire could be called to allow health workers to enter an area of conflict while the underlying benefit to one or more of the groups calling the cease-fire might be to re-arm, re-group, or reposition forces which would most likely postpone an outcome to the conflict or even intensify it.

Some groups might also use the cease-fire as a form of propaganda to gain moral superiority and support for their cause undermining the solidarity between the groups that would otherwise observed. However, to avoid this, most cease-fires established for the benefit of public health are in tandem with the insertion of observers who monitor opposing groups for cease-fire violations.

The involvement of health care workers and health interventions in a conflict for the purpose of gaining ground in human security beyond the scope of health could also jeopardize the legitimacy and ethical grounds that give health workers their neutrality and impartiality.[75] Ultimately, this might have the undesired effect of restricting or prohibiting the presence of health-based aid agencies and workers in areas where they are most needed. More dangerously, participation in human security efforts may prove to be much more favorable to a certain group which would significantly erode the legitimacy of information and education provided by the health sector; being taken as partial, it would place the lives of health care providers at risk by being identified with an opposing force and making them legitimate targets for attack.

7. Conclusion

Human security is jeopardized not only by the direct effects that violence and conflict have on a society, but also by the indirect effects that are felt by people and communities far removed from the physical fighting.[76] As the affairs of countries become more intertwined and interdependent in the coming years, these effects will be even more widespread. Globalization means easier movement of people between countries and at the same time allows countries to take less individual responsibility for global health problems.

Health as a global public good is undersupplied because the market-based incentives are not adequate. Governments in developing countries think the responsibility should be placed on wealthier countries that are better prepared to bear the financial burdens associated with health. Yet developed countries feel that the responsibility needs to be placed on the countries most affected by health problems. In the end, it will take a concerted international effort to stymie the ill effects violence has on human security and to provide necessary and critical public health goods.[77]

Public health interventions can help to contain the effects of violence on a population and preventing further conflicts from developing.[78] In giving communities a larger goal to attain, it serves as a unifying force and shows both sides of a conflict how to get along. Peace-building is a multi-factorial enterprise that requires the participation of many sectors. Integrating public health interventions and involving community health workers in both short-term and long-term peace goals can add to the sustainability and stability of a community. In doing so, higher levels of human security and health can also be achieved.[79] A human security paradigm for the 21st century must include space for public health, and the role of many global public health interventions in both peacemaking and peace-building.

Notes

[1] R. Rodriquez-Garcia, M. Schlesser and R. Bernstein, "Policy Brief: How Can Health Serve as a Bridge for Peace?" The George Washington University School of Public Health and Health Services, May 2001.
[2] Commission on Human Security, *Human Security Now* (New York: Commission on Human Security, 2003).
[3] *Ibid.*
[4] D.R. Meddings, "Human Security: a Prerequisite for Health," *British Medical Journal*, 2001, 322:1553.
[5] "An Agenda for Peace: Preventive Diplomacy, Peacemaking and Peacekeeping: Report of the Secretary-General Pursuant to the Statement Adopted by the Summit Meeting of the Security Council on 31 January 1992," Geneva, United Nations, 199 (A/47/277 – S/24111).
[6] *Ibid.*
[7] *Ibid.*
[8] N. Hitchcock, "Disarmament, Demobilisation & Reintegration: The Case of Angola," *Conflict Trends*, vol. 1, 2004, pp. 36-40.
[9] *Ibid.*
[10] *Ibid.*
[11] *Ibid.*
[12] Commission on Human Security, *op. cit.*
[13] *Ibid.*
[14] Rodriguez-Garcia, Schlesser and Bernsterin, *op. cit.*
[15] "Collective Violence" in E.G. Krug, et al. (eds.), *World Report on Violence and Health* (Geneva: World Health Organization, 2002).
[16] Commission on Human Security, *op. cit.*
[17] L. Chen and Narasimhan. "Human Security and Global Health," *Journal of Human Development*, vol. 4, no. 2, 2003, pp. 181-190.

[18] Commission on Human Security, *op. cit.*
[19] H. Ghobarah, P. Huth and B. Russett, "The Post-war Public Health Effects of Civil Conflict," *Social Science & Medicine*, vol. 59, no. 4, 2004, pp. 869-884.
[20] WHO Commission on Macroeconomics and Health, Working Group 2, "Global Public Goods for Health: the Report of Working Group 2 of the Commission on Macroeconomics and Health," World Health Organization, 2002.
[21] D. Woodward and R.D. Smith, "Global Public Goods and Health: Concepts and Issues" in R. Smith, R. Beaglehole, D. Woodward and N. Drager (eds.), *Global Public Goods for Health: Health Economic and Public Health Perspectives* (New York: Oxford University Press, 2003), pp. 3-39; and I. Kaul, I. Grunberg and M.A. Stern, "Defining Global Public Goods" in I. Kaul, I. Grunberg and M.A. Stern (eds.), *Global Public Goods: International Cooperation in the 21st Century* (New York: Oxford University Press, 1999), pp. 2-19.
[22] WHO Commission on Macroeconomics and Health, *op. cit.*
[23] Kaul, Grunberg and Stern, *op. cit.*
[24] Woodward and Smith, *op. cit.*
[25] *Ibid.*
[26] *Ibid.*
[27] K. Lee and R. Dodgson, "Globalization and Cholera, Implications for Global Governance," *Global Governance*, vol. 6, no. 2, 2000, pp. 213-36.
[28] D.R. Meddings, D.W. Bettcher and R. Ghafale "Violence and Human Security: Policy Linkages" in Lincoln Chen, Jennifer Leaning and Vasant Narasimhan (eds.),*Global Health Challenges for Human Security* (Cambridge, MA: Harvard University Press, 2003), pp. 172-173.
[29] "Collective Violence."
[30] Meddings, Bettcher and Ghafale, *op. cit.*
[31] *Ibid.*
[32] WHO Commission on Macroeconomics and Health, *op. cit.*; and Woodward and Smith, *op. cit.*
[33] WHO Commission on Macroeconomics and Health, *op. cit.*
[34] I. Kaul, Le Goulven K. Conceicao and R.U. Mendoza, "Why do Global Public Goods Matter Today?" in I. Kaul, Le Goulven K. Conceicao and R.U. Mendoza (eds.), *Providing Global Public Goods: Managing Globalization* (Oxford: Oxford University Press, 2003), p.15.
[35] Conventional dictionaries generally define violence as an exertion of physical force so as to injure, damage, or abuse.
[36] "Collective Violence."
[37] *Ibid.*
[38] C.J.L. Murray, G. King, A.D. Lopez, N. Tomijima and E.G. Krug, "Armed Conflict as a Public Health Problem," *British Medical Journal*, vol. 324, 2002, pp. 346-349.
[39] World Health Organization, "Collective Violence," available at <http://www.who.int/violence_prevention/violence/collective/collective/en>.
[40] Murray, King, Lopez, Tomijima and Krug, *op. cit.*
[41] D. Meddings, "Civilians and War: a Review and Historical Overview of the Involvement of Non-combatant Populations in Conflict Situations," *Medicine, Conflict and Survival*, vol. 17, no. 1, 2001, pp. 6-16.

[42] *Ibid.*
[43] M.J. Toole and R.J. Waldman, "The Public Health Aspects of Complex Emergencies and Refugee Situations," *Annu. Rev. Public Health*; vol. 18, pp. 283-312.
[44] M.J. Toole and R.J. Waldman, "Refugees and Displaced Persons," *Journal of the American Medical Association*, vol. 270, no. 5, 1993, pp. 600-605.
[45] C.P. Dodge, "Health Implications of War in Uganda and Sudan," *Social Science and Medicine*, vol. 31, no. 6, 1990, pp. 691-698. Noting that the civil war in Sudan lead to reductions in the health budget, thus disrupting medical services
[46] *Ibid.*
[47] *Ibid.*
[48] *Ibid.*
[49] *Ibid.*
[50] A. Manenti, "Health as a Potential Contribution to Peace 'Realities for the Field: What has WHO Learned in the 1990s,'" World Health Organization, *Health and Conflict*, Department of Emergency and Humanitarian Action.
[51] *Ibid.*
[52] G. MacQueen, McCutcheon and J. Santa-Barbara, "The Use of Health Initiatives as Peace Initiatives," *Peace and Change*, vol. 22, no. 2, 1997, pp. 175-197.
[53] *Ibid.*
[54] *Ibid.*
[55] *Ibid.*
[56] *Ibid.*
[57] *Ibid.*
[58] *Ibid.*
[59] *Ibid.*
[60] *Ibid.*
[61] *Ibid.*
[62] C.G. de Macedo, "Health for Peace in Central America," *PAHO Bulletin*, vol. 20, no. 1, 1986, pp. 62-66.
[63] P. Gutlove, "Health Bridges for Peace: Integrating Health Care with Community Reconciliation," *Medicine, Conflict and Survival*, vol. 14, 1998, pp. 6-23.
[64] World Health Organization, "Report of the consultation on Health as a Bridge for Peace," Geneva, 15 May, 1996, WHO/HP/96.7.
[65] Gutlove, *op. cit.*
[66] *Ibid.*
[67] *Ibid.*
[68] P. Gutlove, "Health as a Bridge to Peace: the Role of Health Professionals in Conflict Management and Community Reconciliation," Institute for Resource and Security Studies, Global Symposium on Violence and Health, sponsored by the WHO Centre for Health Development in Kobe.
[69] A.D. Pinto, "Peace through Health," *University of Toronto Medical Journal*, vol. 80, no. 2, 2003, pp. 158-160; and G. MacQueen and J. Santa-Barbara, "Peace-building through Health Initiatives," *British Medical Journal*, vol. 321, 2000, pp. 293-296.
[70] MacQueen and Santa-Barbara, *op. cit.*
[71] Pinto, "Peace through Health."
[72] MacQueen and Santa-Barbara, *op. cit.*, and *ibid.*

[73] J.H. Geiger and R.M. Cook-Deegan, "The Role of Physicians in Conflicts and Humanitarian Crises: Case Studies from the Field Missions of Physicians for Human Rights, 1988-1993," *JAMA*, col. 270, no. 5, 1993, pp. 616-620.
[74] Commission on Human Security, *op. cit.*
[75] Rodriguez-Garcia, Schlesser and Bernsterin, *op. cit.*
[76] G. Evans, "Health and Security in the Global Village," *World Health Forum*, vol. 14, 1993, pp. 133-135.
[77] See Commission on Human Security, *op. cit.*; P. Gutlove and G. Thompson, "Human Security: Expanding the Scope of Public Health," *Medicine, Conflict and Survival*, vol. 19, 2003, pp. 17-34; I. Kaul and M. Faust, "Global Public Goods and Health: Taking the Agenda Forward," *Bulletin of the World Health Organization*, vol. 79, no. 9, 2001, pp. 869-873.
[78] R. Guerrero, "Violence is a Health Issue," *Bulletin of the World Health Organization*, vol. 80, no. 10, 2002, p. 767.
[79] Commission on Human Security, *op. cit.*