

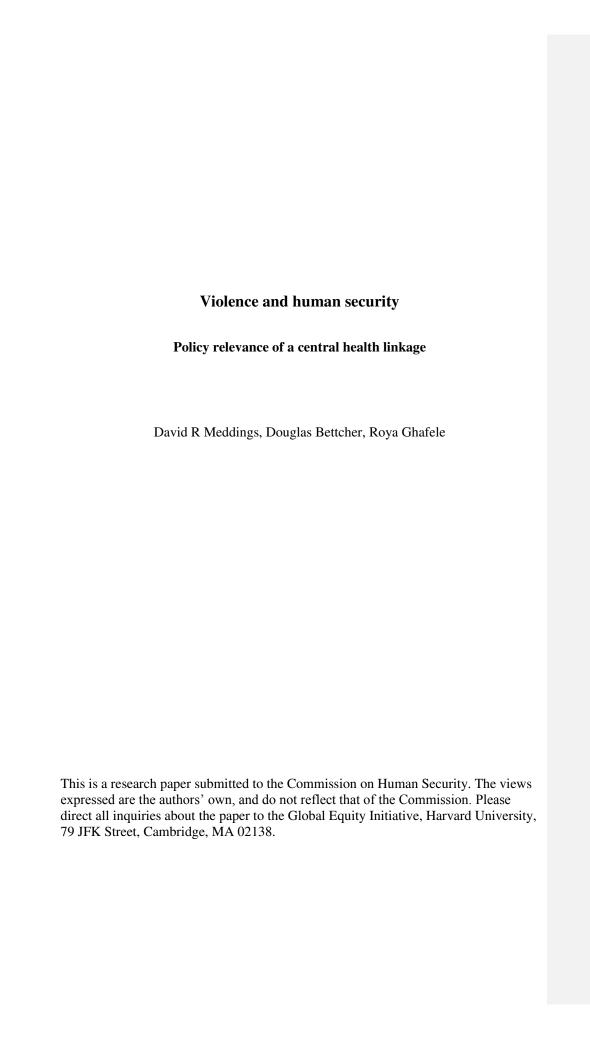
Violence and human security policy relevance of a central health linkage

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Introduction

The World Health Organization defines violence (1) as:

"The intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, that either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment, or deprivation."

Figure 1 provides a typology that allows one to consider different types of violence according to the characteristics of those committing the violent act. Thus, self-directed violence refers to violence inflicted upon oneself, interpersonal violence refers to violence inflicted by another individual or a small group of individuals, and collective violence refers to violence inflicted by larger groups such as states or organized political and military groups.

This paper discusses some of the health linkages of human security that are mediated through violence. It develops and supports five assertions:

- Violence is a central threat to human security under all widely prevailing conceptions of human security
- The types of violence constituting this threat include both collective violence and interpersonal violence
- These types of violence share determinants that are inextricably linked with some
 of the major issues underlying the increased attention that human security has
 received over the last decade

 Coherent policy recommendations to prevent violence would have cross-cutting benefits in terms of reducing a number of threats to human security

Violence, as a human security threat, constitutes a core public health issue. Finally, in an era of globalized threats requiring international cooperation, the discussion focuses on the interstate spillover effects of violence, or in other words, the transnational dimensions of the problem. These arguments are linked to the notion of security as a "contested concept" in the 21st century; in particular our analysis focuses on the implications of the violence case study for conceptualizing sovereignty, the core concept underpinning international relations.

Violence as a health problem

Before developing discussion around these five points, some attention should be given to the attributes and effects of violence that may make it difficult for some to perceive violence as a health problem. On its face, some may feel such discussion unnecessary. After all, one need only consider a physical assault requiring medical attention to make the point that health effects can and do arise following perpetration of violence. However, even though there are obvious health effects that result from violence, these effects arise in a much more manifest way from the interaction of a person with his or her external environment than most other communicable or noncommunicable health conditions. With infectious disease, while the external environment is exceedingly important in providing suitable conditions for infectious agents and their various vectors, one tends to consider the 'illness' within the context of the physiological processes that begin following the entry of an infectious agent into a human host.

Similarly, the 'illness' aspects of noncommunicable conditions such as cardiovascular diseases or malignant processes tend to be considered in terms of physiological changes occurring within a person.

In contrast, the health effects arising from perpetration of violence clearly involve an interaction between a victim and a perpetrator. Whether the mechanism by which violence is inflicted involves forcible restraint or threat of lethal injury during rape or a speeding bullet, there can be no denying that this use of force, essential to the definition of violence, occurs external to the body.

While the intentional use of physical force or power against a person is characteristic of violence, and requires that the health effects of violence are mediated through one's external environment, this feature is by no means unique among the various processes that lead to health outcomes. Although one may focus more easily on the internal physiological changes such as fever and convulsions in a child with malaria, the fact remains that the malaria parasite (or any other infectious agent) has entered that child through an interaction with the child's external environment. Similarly, with many noncommunicable diseases, well prior to a cancerous change within a cell or the deposition of fatty material within a blood vessel, an interaction has taken place with one's external environment.

On reflection therefore, the external environment is an important consideration for many health outcomes. A major and striking difference with violence, however, is that the time lag between an interaction with one's environment and the health effects produced tends to be very short. While there are certainly long-term health effects arising from exposure to violence, the immediate health effects—the fractured bones, the collapse in blood volume—appear without an incubation or latency period to

temporally separate the connection between these effects and the contributory role of one's environment.

Whether this clear and immediate connection with the external environment causes people to view violence more as a criminal justice issue; whether since violence so frequently involves an interaction between individuals, some see it from a sociological perspective; or whether it is so patently obvious that health effects arise from violence that people overlook the health connection in order to establish more meaningful connections; some need to be reminded that violence is, among other things, a health issue.

Indeed, it is not merely because violence gives rise to health effects that it is important and useful to consider violence from a public health perspective. Those with an interest in the health of populations have always attempted to understand interactions between humans and their environment, and determine how this relates to health problems. Deeper consideration of violence reveals many attributes shared with other health problems—the most important being that violence is not a random event.

Age is one of the more striking associations: violence disproportionately affects individuals during their most productive years. In 1998, interpersonal violence, collective violence, and self-directed violence accounted for three of the top six causes of death for individuals of either sex aged 15 to 44 in low- and middle-income countries (2). Interpersonal and self-directed violence were the second and third leading causes of death for the same age group in high-income countries (2). In 2002, the World Health Organization released the *World report on violence and health*, which estimates that 1.6 million people worldwide lost their lives to violence during 2000 (1). Apart from the associations with age, the *Report* also draws attention to a

number of the gender dimensions of violence, with males being victims in over three quarters of homicides and females overwhelmingly represented as victims of forms of interpersonal violence such as intimate partner and sexual violence.

Over and above the age and gender associations, country income is a potent predictor of violence rates. Violent death rates for low- to middle-income countries are more than twice those of high-income countries, and over 90% of violent deaths occur in low- and middle-income countries (1). As will be developed later in this paper, socioeconomic gradients at more localized levels also correlate closely with rates of violence.

Thus, not only is violence a significant contributor to global morbidity and mortality, its occurrence is far from random. Violence is poorly explained as a criminal act committed by isolated individuals, and much more usefully understood as a behavior determined by economic and social development fault lines at the transnational and societal levels, interacting with individual-, familial-, and community-level factors. In sum, violence is a global public health problem that requires a multi-sectoral approach. On reflection, something which is not so very different from the large-scale drainage projects in southern Europe to eradicate malaria, or combined efforts of government and industry to control and reduce exposure to lead.

Violence is a threat to human security

So it seems both useful and eminently appropriate to consider violence as a global public health problem, but is it a threat to human security? A brief look at any of the

widely prevailing conceptions of human security leaves little doubt that violence is indeed a threat to human security.

A characteristic of the human security perspective is that the individual, rather than the state, is the referent object of concern; the value base of human security is squarely people-centered. However, when it comes to defining how broadly or narrowly one should consider threats to the individual, opinions diverge.

Those who consider a broad range of threats typically have a development-oriented view of human security. In 1994, the *Human Development Report* from the United Nations Development Program (UNDP) articulates a widely cited conception of human security:

"Human security encompasses economic security, food security, health security, environmental security, personal security, community security, and political security" (3).

Under this conception, human security includes threats arising, *inter alia*, from poverty, hunger and famine, health outcomes, violence, political repression, and environmental degradation. In discussing the threat of violence the report elaborates:

"Perhaps no other aspect of human security is so vital for people as their security from physical violence. In poor nations and rich, human life is increasingly threatened by sudden, unpredictable violence" (3).

Those who view threats to human security more narrowly tend to emphasize those issues posing a direct threat to the personal safety and well being of the individual. The Canadian government is one of the more readily identified proponents of a narrower range of threats (4, 5).

A criticism of the broad conception of human security has been that it conflates a broad range of threats to the individual under the banner of 'insecurity.' While this heading may offer advantages of advocacy and mobilizing diverse constituencies, it has been argued that it does so at the cost of undermining the descriptive power of the concept of human security. On the other hand, the broader conception of threats better reflects the values underlying concern for the well-being of individuals, and is less concerned with analytical methods to support it.

This paper does not advocate either a broad or narrow conception of threats. Of far greater relevance is that violence remains a central concern to either viewpoint.

Indeed, as Kanti Bajpai points out, violence figures prominently in the overlap between the two threat agendas:

"Most of the threats listed by both the UNDP and Canadian government papers relate to personal safety and well being. Both identify indirect and direct threats. Amongst the direct threats, they both list everyday violent crime, child abuse, and abuse of women. Much higher up the ladder towards more organized direct violence, they both list government repression, terrorism, and genocide. Canada lists, in addition, various other kinds of direct violence – call it societal violence – that endanger personal safety including the existence of private security forces, banditry, warlordism, internal war, and ethnic violence. The Canadian writings in particular include organized violence that is more familiar in security thinking—transnational violence and international/global violence" (6).

Clearly, the threat of violence to the individual remains a central preoccupation, whether one's conception of human security focuses on a narrow range of threats or a broader one. Violence—whether interpersonal or collective—has been a central and

consistently articulated concern for many scholars and political figures who have sought to define human security from either a broad or a narrow perspective. ^{1,2,3,4} Moreover, both of these perspectives contend that the traditional concept of security that dominated the Cold War era, focusing on the threat of military aggression across borders and the military means to face such threats, is not sufficient to conceptualize the international security challenges that have emerged in the post Cold War era. While the end of the Cold War does not mean that these traditional security issues are no longer relevant, there are mounting demands that the security agenda should provide space for the threats to human life and collective security, often non-military in origin, such as interpersonal and ethnic violence, organized crime, and economic instability (7).

More recent developments in refining the concept of human security also keep violence squarely anchored within the human security discourse. Through a variety of meetings and consultations since its inception, the Commission on Human Security has elaborated a working definition of human security that advocates the objective of human security is to safeguard the vital core of all human lives from critical and pervasive threats (8). The term 'vital core' includes elements such as the rights and freedoms allowing survival, livelihood, and basic dignity. The two essential attributes

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¹ "Once synonymous with the defense of territory from external attack, the requirements of security today have come to embrace the protection of communities and individuals from internal violence." Kofi Annan Millennium Report, Chapter 3, p. 43-44.

² "Several key elements make up human security. A first essential element is the possibility for all citizens to live in peace and security within their own borders. This implies the capacity of states and citizens to prevent and resolve conflicts through peaceful and nonviolent means and, after the conflict is over, the ability to effectively carry out reconciliation efforts." Sadako Ogata, Asian Development Bank Seminar, 27 April 1998.

³ "What do we mean by human security? We mean, in its most simple expression, all those things that men and women anywhere in the world cherish most: enough food for the family; adequate shelter; good health; schooling for the children; protection from violence whether inflicted by man or by nature; and a State which does not oppress its citizens but rules with their consent." United Nations Deputy Secretary-General Louise Frechette, Vienna International Center, 9 October 1999.

of the term 'critical and pervasive threats' are that these threats affect core activities of human lives and do so on a large scale and/or in a nonanomalous manner (8). Clearly violence in many forms has direct negative impacts on survival, livelihood, and basic dignity. The large scale and nonanomalous aspects of violence will be covered in the next section, which develops a profile of the forms of violence that constitute critical and pervasive threats to populations around the globe.

Violence as a critical and pervasive threat – a global overview

Table 1 provides estimated deaths due to collective violence from the 16th through the 20th centuries. Despite the large degree of uncertainty surrounding these estimates, the rise in death rates, particularly pronounced in the 20th century, is nevertheless striking.

According to the *World health report 2001*, an estimated 310,000 people lost their lives as a direct result of collective violence during 2000, with over half of these deaths occurring in sub-Saharan Africa, and men aged 15 to 44 accounting for well over a third of mortality (9). Estimating nonfatal outcomes is difficult; however, the numbers are likely to be substantial given that the ratio of injured to killed among military personnel across a wide range of conflict settings, derived by dividing the number of combatants wounded to those killed, has been reported to range from 1.9 to 13.0, with an average around 3.0 (10).

A wide variety of indirect effects on health arise from the disruptive social changes that accompany collective violence. Collective violence typically creates population

⁴ "Human security relates to the protection of the individual's personal safety and freedom from direct

displacement and a substantial degradation of social infrastructure, such as health care systems and food production and distribution networks (11, 12). Not infrequently, life-sustaining civilian infrastructure is specifically targeted in conflicts through acts such as the destruction of food and water distribution complexes and the execution of health care workers (13, 14). Research in these settings has shown a significant reduction in indicators such as vaccination status that accompany collective violence (15). Furthermore, many efforts to control or eradicate disease that have been dramatically successful elsewhere founder in settings where collective violence is occurring.

While it is difficult to estimate with precision the burden of health effects that are attributable to these changes, evidence suggests it is substantial. Crude mortality rates in displaced populations fleeing collective violence have been reported at 5 to 12 times the baseline rates (16), and were substantially higher among those fleeing the Rwandan genocide who arrived in Goma (17). The primary causes of death in these circumstances are communicable diseases and malnutrition, and the incidence of AIDS in Africa is thought to have increased considerably as a direct result of civil wars (18, 19). Beyond the morbidity and mortality related to communicable disease and malnutrition, a broad range of health outcomes has been documented in populations exposed to collective violence, including disability and psychosocial and reproductive health sequelae (17).

Furthermore, due to the nature of collective violence, it seems reasonable to expect that these indirect health effects would not be limited to the time period during which the violence occurs. A recent statistical assessment using cross sectional data indicates

and indirect threats of violence." Kanti Bajpai, Joan B. Kroc Institute Report, No. 19. Fall 2000, p. 48.

that the total disability adjusted life years (DALYs) lost in 1999 due to the indirect effects of collective violence from 1991 to 1997, was about the same as the number lost through direct effects of collective violence in 1999 (16).

There seems to be little doubt that collective violence constitutes a 'critical and pervasive threat' to the vital core of human well-being in regions where it is occurring. Indeed, most people who think of violence in relation to human security probably consider war as the primary violence-mediated human security threat. The Rwandan genocide and ethnic cleansing in the former Federal Republic of Yugoslavia are rightly viewed as watershed events in the development of the human security discourse, not least for the catastrophic loss of life that accompanied this collective violence, but also for the dilemma these events posed to an international community struggling to value state sovereignty and human security simultaneously.

But what about interpersonal violence? Are there settings in which interpersonal violence constitutes a critical and pervasive threat? The *World report on violence and health* estimates that in the year 2000, interpersonal violence accounted for almost twice as many deaths as collective violence (1). There is an obvious difference in terms of public visibility—collective violence tends to be heavily mediatized while interpersonal violence in many forms tends to be concealed. For example, Brazil is not a country at war. Largely because of this, few people would be aware that in addition to the 467 Israeli or Palestinian minors killed due to conflict from 1987 to 2001, a staggering 3937 children under the age of eighteen were murdered by firearms in the municipality of Rio de Janeiro alone—an eightfold difference (20).

Across Latin and Central America, particularly in urban areas, violence is a daily threat. The ACTIVA project was a multicenter study coordinated by the Pan

American Health Organization to assess violence and related norms and attitudes in selected cities in Latin and Central America as well as Madrid (21). Almost 11,000 interviews were conducted among a sample that stratified population groups according to socioeconomic level and population density within the eight cities involved. The sample represented the relevant urban populations from ages 18 to 70, and was of sufficient size to permit estimates with 95% reliability. The proportion of respondents indicating that they had been victims of violence (armed robbery, extortion by a public authority, physical assault, or knife or bullet wounds) during the prior 12 months ranged from 10.6% in Santiago, Chile, to 38.5% in San Salvador, El Salvador.

Urban violence has begun to attract an increasing amount of research attention; some aspects will be discussed in the subsequent section. It should be noted however that while the largest cities were located in high income countries until the 1960s, this is no longer the case. Today some of the world's largest cities, and the megacities of the future, are found in the developing world (22). It has been estimated that every five years, 60% of inhabitants of cities with populations of 100,000 or more become victims of violence (22).

The Banshbari slum is located in the midwestern part of Dhaka, Bangladesh.

Although throughout the 1970s it was a rapidly growing urban slum, its residential population has decreased during the 1990s, due to newly established housing societies, to around 2000. Those who remain are both politically and economically marginalized. Participatory rural appraisal methods have been used to probe residents' perceptions of violence and insecurity (23). Those interviewed report that the occurrence of firearm-related violence has increased steadily since the mid-1990s

through to the time of the appraisal, that essential tasks such as gathering firewood are fraught with insecurity, and that residents do not go outside after nightfall. There are frequent references to the deliberate targeting of women for abduction, rape, and trafficking, with one woman reporting:

"I wish I could run and escape from them because anything can happen to me. I can be raped by a number of them....They can traffic me out of the country or sell me to a brothel; they can keep me in captivity and use me as a prostitute for life. Even if I come back from them somehow, the society will not accept me; they will think I am spoilt and nobody will marry me. My family will lose face in the society."

A central problem in shedding light on the nature of the threat of interpersonal violence in settings where it is pervasive is the absence of reliable data. South Africa has made considerable inroads in addressing this issue by establishing the National Injury Mortality Surveillance System (NIMSS) (24). NIMSS is a mortuary-based surveillance system that captures key information on fatal injuries. As of 2001, the system provides descriptive data from 32 mortuaries in six provinces and is estimated to provide this information for just over a third of externally caused deaths within South Africa. The data are biased towards urban areas, although 14 of the mortuaries serve largely rural areas. Homicide was the leading cause of death and accounted for 44% of the 25,361 fatal injuries recorded in 2001, with over half of these inflicted by firearms.

The United States, long cited as the setting with the highest firearm homicide rates among high-income countries, experienced what has been described as an epidemic of firearm-related violence from the mid-1980s to 1993 (25). During the peak of the

epidemic, firearm-related homicide rates reached almost 7 per 100,000 for the American population as a whole. However, this aggregate figure disguises the fact that rates among age and ethnic groups were much higher. In fact, in many American cities a black male who turned 18 in 1989 had roughly a one in 20 chance of being murdered by 1995 (26). While the ability to disaggregate data to these finer levels makes such analyses possible, it is sobering to reflect that while rates of firearm-related violence in the United States are definitely high relative to other high-income settings, they pale in comparison to rates observed in many low- and middle-income settings. Indeed, firearm homicide rates of 40 and 50 per 100,000—roughly sixfold higher than the peak of the U.S. epidemic—have been reported to the WHO for Brazil and Colombia respectively (27).

Shared determinants – implications for the human security policy agenda

Despite the readily discernible difference in public visibility, there are a number of notable similarities between collective and interpersonal forms of violence. Most important for the human security discourse and its policy implications is that both forms share a number of determinants and the capacity to be self-perpetuating. Indeed, if a central challenge for those engaged in furthering the human security discourse is to propose integrated responses to approaching human security threats, then discussion of these issues is highly relevant.

The vulnerability of populations to either interpersonal or collective violence is influenced by a variety of factors in the political, economic, and social spheres. These include:

- 1. Weak economic development at the country level
- Inequalities in access to economic, political, and social resources at the societal level
- 3. Weak forms of governance and forms that are not socially redistributive
- 4. A number of factors linked to globalization, including:
 - Abrupt changes in political and social structures
 - Aspects of globalization linked to financial movements and opportunities
 - Transnational flows of weapons, particularly small arms

Per capita GDP

A striking association with both rates of interpersonal violence and the occurrence of collective violence is low per capita gross domestic product (GDP) at the country level. Over the years, a number of studies have demonstrated the relationship between country level GDP per capita and homicide rates (28, 29), and Figure 2 shows geographical distribution of estimated rates of youth homicide for 2000.

Analysts who have studied causes of civil war tend to agree that per capita GDP is an important predictor of the risk of armed conflict, although there is disagreement on the nature of this relationship. Some stress the importance of incomes that rely on primary commodity exports (30), while others offer evidence to contradict this view. Others still posit that economic growth generates political instability and potentially fuels collective violence in poor economies, while offering a protective effect in richer countries (31).

Horizontal inequalities

Disparities in access to economic, political, and social resources at the societal level also have been demonstrated to correlate with both interpersonal and collective violence. Increasing inequalities in income distribution as measured by indicators such as the Gini coefficient correlate with rising homicide rates; this relationship persists despite statistical control for a variety of national characteristics and appears repeatedly across a number of study settings (32). Similarly, a number of analysts have argued that in addition to inequalities in income distribution, unequal access to political and social resources, or predominance of one ethnic community over another, are powerful drivers of political instability and collective violence (31, 33).

Quality of governance

Given that the vast majority of conflicts occur within states, it is perhaps not surprising that a number of scholars cite real or perceived failures of governance—whether related to the provision of services and redistribution of social goods, the degree of political inclusiveness, or other aspects of perceived quality of governance—as an important determinant of conflict (33, 34). In this respect, Axworthy observes that:

"The meaning of security is being transformed. Security traditionally has focused on the state because its fundamental purpose is to protect its citizens. Hobbled by economic adversity, outrun by globalization, and undermined from within by bad governance, the capacity of some states to provide this protection has increasingly come into question" (35).

Notwithstanding the logic of this viewpoint, it is important to note that there are a number of areas where consensus is lacking on fundamental issues such as the importance of inclusive democracies as a form of governance, and the causal relationship between grievances related to governance and civil conflict. These and a host of other issues related to policymaking in relation to collective violence have recently received a thorough review (36).

Forms of governance that provide social redistribution of collective goods and social protection correlate with lower rates of interpersonal violence. For example, homicide arrest rates have been found to be negatively associated with homicide rates, suggesting that modes of governance that actively support the rule of law help to deter further violence (37). Various forms of collective social protection, and forms of redistribution such as welfare expenditures, have also been shown in association with lower rates of interpersonal violence (38, 39).

Effects of globalization

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 (40). While globalization is not a new phenomenon, the manner in which the world has become increasingly interdependent in recent times has created the conditions under which populations experience rapid and fundamental social, political, and economic changes; globalization in recent times has assumed a magnitude—and taken on patterns—unprecedented in world history (41). The

interaction of the processes of globalization and the international system is changing the face of the 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. In this way, the dramatic improvements in the health of the world's population achieved in the 20th century can be maintained in the 21st century (41). 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.

The end of the Cold War era brought relatively abrupt and far reaching consequences to the political and social structures of the former Soviet bloc, as well as radical changes affecting livelihood strategies. Comparison of regional trends in youth homicide between western Europe and some countries of the former Soviet bloc between from 1985 to 1995 illustrates some of the associated changes in interpersonal violence that were observed during this period of transition. Homicide rates in the 10 to 24 age bracket increased by over 150% from 1985 to 1994 in the Russian Federation, and by 125% over the same period in Latvia (1). In both settings the proportion of homicides attributable to firearms more than doubled. By contrast, homicide rates and the proportion attributable to firearms within western Europe remained generally low and stable.

There is general consensus that political instability is a predictor of collective violence (31, 36). Furthermore, it has been argued that transitional states are particularly at risk

for civil war, whereas either repressive autocracies or inclusive democracies tend to have low levels of civil violence (42).

Financial factors related to globalization may also contribute to changes in violence. A recent study of predictors of foreign direct investment indicates that poor rule of law and corruption are most detrimental for investment (43). Since forms of governance that support respect for the law are associated with lower rates of interpersonal violence, countries with high or increasing rates of interpersonal violence would appear to be at risk for reduced investment or capital flight, potentially aggravating socioeconomic inequities with the possibility for further increased rates of interpersonal violence (7).

With respect to collective violence, there is little doubt that economic motivations have played a major role in initiating conflicts, and that the 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. The aspects of globalization that permit easily concealed payments and expedite exchanges of assets greatly facilitate this economic activity. A wide variety of economic networks have been used to conduct transborder trade and exploit the global economic system in order to support war economies (44).

Transnational Spillover Effects

The impact of interpersonal violence on the international system, in particular the transnational spillover effects, has yet to be fully studied. However, the global epidemiology of interpersonal violence, which clearly demonstrates a world dividing into clusters of high-violence and low-violence societies, does not bode well for the future stability of the international system. As noted above, these clusters of violence

coincide, for the most part, with the division between low-to-middle income and high income countries. To the extent that interpersonal violence leaches a society's economic growth potential, it is reasonable to conclude that interpersonal violence is widening the gap between the rich and poor.

Such disparities and the emergence of clusters of intense violence within nations enhance the probability of state collapse and disintegration, and the emergence of failed states. It may be argued that the contemporary international system already contains states and quasi-states, a different situation from a world containing only states (45). Such quasi-states have a greater probability of becoming failed states, which may be defined as:

"A situation where the structure, authority (legitimate power), social, and political order of a state have fallen apart. This is accompanied by social violence and the privatization of security." (46).

Collapsed or quasi-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 diseases, undernutrition and malnutrition, and rape or unsafe sex. Such environments also become prime breeding grounds for organized crime and terrorism. These few examples show how the root causes of violence are intimately linked and have the potential to propagate other public health problems, such as infectious disease epidemics. The uneven and contradictory characteristics of our emergent global society are accompanied by global social movements, both positive and negative, and the fragmentation of many nation-states.

Therefore, from an international perspective, violence has the capacity to seriously weaken worldwide stability. People flee from violence. According to UNHCR "armed conflict is now the driving force behind most refugee flows (47). In other words, in a globalized world one cannot be secure if one's neighbor, even a distant neighbor, is not secure. Violence has significant spillover effects. In Austria, for instance, the refugee flows from the Balkans led to an anti-foreigner referendum, and most likely contributed to the success of the extreme right party in the elections of 1999.

Another aspect of globalization that is associated with both collective and interpersonal violence is the issue of transnational flows of weapons, particularly small arms. The movement of these weapons over porous borders following conflicts and in the wake of organized crime and the drug trade has attracted increasing international concern and attention in recent years. Both collective violence, through perpetuation of conflicts and exacerbation of regional instabilities, and interpersonal violence, through noncombat-related assaults, have been linked to the uncontrolled and widespread availability of these weapons (48).

Given these shared determinants, it should come as no surprise that collective violence and interpersonal violence are interrelated, and that the effects of interpersonal violence in an interconnected world are not hermetically contained within state boundaries, or for that matter within nonexistent failed state borders. Collective violence is associated with an increase in homicide and other crimes, both during the phase of violence and thereafter, and also has been shown to lead to increased suicide rates in settings bordering civil wars (16). The experience of international war has been reported to make the use of violence within states more common (49, 50). Moreover, the spillover effects of violence and political

disintegration are waves of other public health problems such as communicable disease epidemics, rape, the rampant spread of sexually transmitted diseases, and mass migration. Thus, interpersonal violence and the concomitant political instability it brings represent serious transnational challenges to both the international system and global public health.

Security as a Contested Concept

In the emerging international relations discourse of the 21st century, many writers agree that security is a contested concept. While there is general agreement that security implies freedom from threats to core values (for both individuals and groups), there are diverging views whether the main focus of the emerging security discourse should be on individual, national, or international security (51). Traditionalists argue that security issues are within the realm of domestic and not international responsibility. However, this realist approach is unable to deal with threats that states bring upon their citizens or violent threats that arise within the state; realism conceptualizes an ahistoric and abstract international system where anarchy and power dominate the relations between states. The concept of state sovereignty dominates this view of international relations and is rooted in the origins of the modern international system traced back to the Treaty of Westphalia in 1648.

This paper argues that the security discourse must go beyond a tightly defined realist perspective focusing on interstate military force to include emerging threats, especially violence and the determinants of interpersonal violence, as integral human security concerns. In an increasingly globalized world, security threats stem from

complex systems, both natural (e.g., the ecosystem) and human made (the global economy and interpersonal violence), in which individuals, states, and the system all play a part, and in which economic, societal, and environmental factors are as important as political and military ones (52). In this regard, challenges to the international system such as interpersonal violence require a rethinking of state sovereignty that includes global attention to the subnational and transnational dimensions of interpersonal violence as both a human security and public health priority. A sole emphasis on the state, state sovereignty, interstate relations, and interstate security—the traditional security paradigm—cannot address the security issues outlined in our analysis.

The human security issues enumerated in this paper provide other dimensions to the emerging global security agenda that characterizes the post Cold War era. A security paradigm for the 21st century must include space for individual, state, and transnational problems, such as the proliferation of interpersonal violence in many areas of the world. In other words, it requires a rethinking of conventional notions of world politics and international relations. No country alone can address the security challenges of this new era in world affairs. In this respect, we believe that contesting traditional concepts of security is a positive development, and one that can only lead to more effective ways of addressing serious human security challenges such as interpersonal violence.

Conclusion

Consideration of these shared determinants for interpersonal and collective violence should bring to mind some areas of policy action that would advance the human

Comment [PT1]: This paragraph seems to repeat many of the themes in the preceding paragraph. Tricia, this was one of the contributions Douglas made to the paper – while I agree it does share a broad thematic focus with the preceding paragraph I think it goes beyond that and tries to cap off the preceding paragraph's line of argumentation with a connection to the human security issues made more broadly in this paper. I'd prefer to keep this paragraph.

security agenda. Viewed broadly, the intent of these policies should be to address the transnational- and societal-level determinants of these forms of violence.

Strengthening mechanisms may be used to reduce inequalities, promote effective and inclusive forms of governance, and protect individuals and populations from the downside risks of globalization through better control and transparency of certain international markets. Efforts in these areas would have cross-cutting benefits for a number of other health and nonhealth threats to human security as well.

On its face, advancing such an agenda may seem problematic to differences in North-South priorities. However, the North has a rational interest in preventing violence in the South—not least because it effectively bankrolls the costs of this violence through collapsed development initiatives, humanitarian aid, and peacekeeping. Illegal migration arising from this violence is a volatile political issue for the North (34). Interpersonal violence and collective violence exemplify threats to human security, and a policy agenda responding to their fundamental determinants would have benefits for a number of other human security threats. In addition, interpersonal

"In such condition there is no place for industry...no arts; no letters; no society; and which is worst of all, continual fear, and danger of violent death; and the life of man, solitary, poor, nasty, brutish, and short (53)."

violence and collective violence are important global public health problems; in fact,

a particularly apt description of ill health was provided by Thomas Hobbes in the

seventeenth century in describing life without security:

We therefore contend that if international society ignores the threats to human security and public health posed by interpersonal violence, it does so at its peril.

Table 1: Estimated historical deaths and annual rates of death due to collective violence,

16th to 20th centuries

Century	Estimated deaths during century (millions) (1)	Estimated mid-century population (millions) (54)	Estimated annual death rate per 100,000
16 th	1.6	500	3.2
17^{th}	6.1	545	11.2
18^{th}	7.0	790	8.9
19 th	19.4	1260	15.4
20 th	109.7	2520	43.5

References

- 1. Krug EG et al., editors. *World report on violence and health*. Geneva: World Health Organization; 2002.
- 2. Krug EG, Sharma GK, Lozano R. The global burden of injuries. *American Journal of Public Health* 2000 April;90(4):523-6.
- 3. United Nations Development Programme. *Human development report 1994*. New York: Oxford University Press; 1994.
- 4. Axworthy L. Canada and human security: the need for leadership. *International Journal* 1997;52:183-96.
- 5. Department of Foreign Affairs and International Trade (DFAIT), Government of Canada. Human security: safety for people in a changing world. 1999. Available from DFAIT website: URL: http://www.dfait.maeci.gc.ca/foreignp/HumanSecurity/secure.htm, accessed on 2003 February 15
- Bajpai K. Human Security: Concept and measurement. Occasional Paper 19:OP:1.
 Notre Dame (IN): The Joan B. Kroc Institute for International Peace Studies. 2000
 Aug. p. 25-6.
- 7. Wipfli H, Bettcher D, Ouseph R, Monteiro M, Butchart A, Cosivi O, et al. Health security issues. In: EOLOSS Encyclopaedia. In press 2003. (CITY? PUBLISHER?: Tricia, I have emailed the editor in Australia to receive more information, but have not yet heard back from the. Douglas)
- 8. Alkire W. Conceptual framework for human security. 2002 Feb 16. Available from: URL: http://www.humansecurity-chs.org/doc/frame.html, accessed on 2003 February 15
- 9. World Health Organization (WHO). World health report 2001. Geneva: WHO; 2001.

- 10. Coupland RM, Meddings DR. Mortality associated with use of weapons in armed conflicts, wartime atrocities, and civilian mass shootings: literature review. *British Medical Journal* 1999;319:407-10.
- 11. Collier P. On the economic consequences of civil war. *Oxford Economic Papers* 1999;51:168-83.
- 12. Stewart F. War and underdevelopment: can economic analysis help reduce the costs? *Journal of International Development* 1993;5(4):357-80.
- 13. Fitzsimmons DW, Whiteside AW. Conflict, war, and public health. Conflict Studies 276. London: Research Institute for the Study of Conflict and Terrorism; 1994.
- 14. Toole MJ. Displaced persons and war. In Levy BS, Sidel VW, editors. *War and Public Health*. Updated edition. Washington: American Public Health Association; 2000.
- 15. Garfield RM, Frieden T, Vermund SH. Health-related outcomes of war in Nicaragua. *American Journal of Public Health* 1987;77:615-8.
- 16. Ghobarah H, Huth P, Russett B. Civil wars kill and maim people long after the shooting stops. *American Political Science Review*. In press 2003.
- 17. Meddings DR. Civilians and War: A review and historical overview of the involvement of non-combatant populations in conflict situations. *Medicine, Conflict and Survival* 2001;17:6-16.
- 18. Reid E. A future, if one is still alive: the challenge of the HIV epidemic. In: Moore J, editor. *Hard choices: Moral dilemmas in humanitarian intervention*. Lanham, MD: Rowman & Littlefield; 1998. p. 269-86.
- 19. Epstein H. AIDS: The lesson of Uganda. *New York Review of Books* 2001;48(11):18-23.

- 20. Dowdney L. Child combatants in organised armed violence: a study of children and adolescents involved in territorial drug faction disputes in Rio de Janeiro. First edition for presentation at the Seminar on Children Affected by Organised Armed Violence; 2002 Sep 9-13; Rio de Janeiro, Brazil. p. 125.
- 21. Cruz JM. Victimization from urban violence: levels and related factors in selected cities of Latin America and Spain. Research in Public Health Technical Papers Project Activa 4. Washington: Pan American Health Organization; 1999 Jan.
- 22. Cornelius-Taylor B, Handajani YS, Jordan S, Köhler G, Korff R, Laaser U et al. Urbanization and public health—a review of the scientific literature. In: Strohmeier KP, Köhler G, Laaser U, editors. *Pilot research project on urban violence and health:* Determinants and management; a study in Jakarta, Karachi and conurbation Ruhrgebiet. Lage: Jacobs; 2002. p. 31-77.
- Regional Centre for Strategic Studies. Small arms and human insecurity.
 Colombo: Regional Centre for Strategic Studies; 2002.
- 24. Matzopoulos R. A profile of fatal injuries in South Africa. Third annual report of the National Injury Mortality Surveillance System. Johannesburg: Medical Research Council of South Africa, University of South Africa; 2002 Dec.
- 25. Wintemute G. Guns and gun violence. In: Blumstein A, Wallman J, editors. *The crime drop in America*. Cambridge: Cambridge University Press; 2000. p. 45-96.
- 26. Cook PJ, Laub JH. The unprecedented epidemic in youth violence. In: Moore MH, Tonry M, editors. *Crime and justice: A review of research*. Chicago: University of Chicago Press; 1998. p. 101-38.
- 27. Department of Injuries and Violence Prevention, World Health Organization.Small arms and global health. Geneva: World Health Organization; 2001.

- 28. Rahav G, Jaamdar S. Development and crime: a cross-national study. *Development and Change* 1982; 13(4):447-62.
- 29. Krahn H, Harnagel TF, Gartrell JW. Income inequality and homicide rates: crossnational data and criminological theories. *Criminology* 1986;24:269-95.
- 30. Collier P, Hoeffler A. Greed and grievance in civil war. Manuscript. World Bank; 2001. Available from: URL:

http://econ.worldbank.org/files/12205_greedgrievance_23oct.pdf, accessed on February 15, 2003

- 31. Gates S. Empirically assessing the causes of war. Paper presented to the 43rd Annual Convention of the International Studies Association; 2002 Mar 24-27; New Orleans, USA.
- 32. Messner F. Economic discrimination and societal homicide rates: further evidence of the cost of inequality. *American Sociological Review* 1989;54:597-611.
- 33. Stewart F. Root causes of violent conflict in developing countries. *British Medical Journal* 2002 Feb 9;324:342-345.
- 34. Gurr TR. *Minorities at risk: a global view of ethnopolitical conflicts*. Washington: Institute of Peace Press; 1993.
- 35. Axworthy L. Human security and global governance: putting people first. *Global Governance* 2001;7(1):19.
- 36. Mack A. Civil war: academic research and the policy community. *Journal of Peace Research* 2002;39(5):515-25.
- 37. World Bank Latin American and Caribbean Studies. Viewpoint Series.

 Determinants of crime rates in Latin America and the world. Washington: World Bank; 1998.

- 38. Pampel FC, Gartner R. Age structure, socio-political institutions, and national homicide rates. *European Sociologic Review* 1995;11(3):243-60.
- 39. Messner SF, Rosenfeld R. Political restraint of the market and levels of criminal homicide: a cross-national application of institutional-anomie theory. *Social Forces* 1997;75(4):1393-1416.
- 40. Lee K, Dodgson R. Globalization and cholera: implications for global governance. *Global Governance* 2000;6(2):213-36.
- 41. Yach D, Bettcher D. The globalization of public health I: threats and opportunities. *American Journal of Public Health* 1998;88(5):735.
- 42. Hegre H, Ellingsen T, Gates S, Gleditsch NP. Towards a democratic civil peace? Democracy, political change, and civil war. *American Political Science Review* 2001;95(1):33-48.
- 43. International Finance Corporation. Investment and uncertainty, a comparative study of different uncertainty measures. Technical Paper 4. Washington: International Finance Corporation; 1997.
- 44. Duffield M. Globalization, transborder trade, and war economies. In: Berdal M, Malone D, editors. *Greed and grievance: Economic agendas in civil wars*.

 Boulder:Lynne Rienner; 2000. p. 69-90.
- 45. Jackson R. *Quasi-states: sovereignty, international relations and the Third World.*Cambridge (UK): Cambridge University Press; 1990.
- 46. Zartmann W. *Collapsed states: the disintegration and restoration of legitimate authority*. Boulder (CO): Lynne Rienner; 1995. 1: 1-320.
- 47. UNHCR. Human rights and small arms: the human rights impact of small arms and light weapons. Geneva: UNHCR; 2001. 283: 1-320.

- 48. Meddings DR. Weapons injuries during and after periods of conflict: retrospective analysis. *British Medical Journal* 1997 Nov 29;315:1417-20.
- 49. Stein AA. *The nation at war*. Baltimore (MD): Johns Hopkins University Press; 1980.
- 50. Archer D, Gartner R. Violent acts and violent times: a comparative approach to postwar homicide rates. *American Sociological Review* 1976; 41(4):937-63.
- 51. Baylis J. What is meant by the concept of security? In: *The globalization of world politics*. Baylis J and Smith S, editors. Oxford: Oxford University Press; 1997. p. 194.
- 52. Buzan B, *Peoples, states and fear: an agenda for international security studies in the post-Cold War era.* Hemel Hempstead: Harvester Wheatsheaf; 1991.
- 53. Hobbes T, Leviathan. Everyman's Library. New York: Dutton; 1950. p. 103-4.
- 54. United Nations Population Division. *The world at six billion*. New York: United Nations; 1999.