GUEST EDITORIAL

Healing Our Planet: Physicians and Global Security

Neil Arya

Physicians for Global Survival, the Canadian affiliate of the International Physicians for the Prevention of Nuclear War (IPPNW)

Health professionals, through their knowledge of medical ethics, public health models, and direct advocacy may suggest treatment of the vexing new problems of the 21st century. The evolving concept of Peace through Health encapsulates such activities, and *Croatian Medical Journal's* activities in the 1991-1995 war in Croatia is one example of such work. The Responsibility to Protect report, on the duty of the international community to prevent genocide and ethnic cleansing, shows the congruence of medical ideas with the domain of international affairs. Collateral Damage, a report on potential health consequences of war on Iraq, is a recent example of the increasing involvement of physicians in the direct conduct of world affairs. Prevention and healing on a global scale require clear ethical principles for action, just as they do in the personal practice of medicine.

Key words: *international cooperation; Iraq; nuclear warfare; physicians; physician's role; United States; war*

Since September 11, 2001, new perceived threats to global security have come to dominate the international agenda, including terrorism, the *rogue states* – as the US calls them, and the proliferation of weapons of mass destruction. State powers see answers to these challenges largely in military terms: increased defense budgets, more hardware, a "missile shield", weapons in outer space, and "regime change" (1).

As citizens, we must evaluate whether these approaches are likely to enhance our security. Bearing September 11 in mind, a year and a half later, billions of dollars and thousands of lives later, are we really more secure? Will aggressive military posturing resolve the threats posed by North Korea or the problems of suicide bombers in the Middle East? Will launching a strike on Saddam Hussein and the Iraqi people make the world safer? And why were President Bush's appeal to moral clarity – "if you're not with us, you're with the terrorists" (2), and Prime Minister Blair's exhortation to disarm Saddam by whatever necessary means possible, met in Britain with protest, with the former considered a greater threat to world peace than Saddam Hussein and the latter characterized as Bush's poodle (3)?

If such approaches have not improved security, could it be that our leaders have the diagnoses wrong? For instance, many critics attribute the rise of extremism to the long-standing failure of the international community to take responsibility for protecting economic and civil rights for the poor and disenfranchised (4).

As physicians, we may treat victims of armed conflict or their family members, those traumatized either by terrorism or a government's response to it. If not directly exposed, we are certainly affected by our governments' decisions. Putting more resources into combating bioterrorist threats may divert precious resources from other public health needs. The choice of the US government to spend $400 billion on defense (5) when more than 40 million US citizens are without health insurance (6) is arguably a choice to place military security over the kinds of security provided by addressing the broader determinants of health. Most would agree that doctors have a right or even duty to comment on such decisions that directly affect our patients.

However, even those who are skeptical of the approaches currently favored by the US and British governments might balk at the idea that physicians, by virtue of their profession, have any particular expertise on questions of global security.

Two recent reports suggest that physicians do have the expertise to deal with these vexing problems, that we have a duty to act and possibly may already be influencing decision makers. *Collateral Damage: the Health and Environmental Costs of a War on Iraq* (7), produced by Medact, the British affiliate of International Physicians for the Prevention of Nuclear War (IPPNW), was released the day after Remembrance Day, September 11, 2002. Though ostensibly an objective analysis by medical doctors assessing the likely human impact of war on Iraq, its eth-

ical message that physician's responsibility is to prevent human suffering shines throughout. *The Responsibility to Protect* (8), authored by diplomats, political scientists, military officials, and government leaders on the International Commission on Intervention and State Sovereignty in Ottawa 2001, was released shortly after September 11, 2001. It demonstrates an interesting congruence between the ethics underlying the practice of health professions and the new "human security" approach of interest to many policy makers. Each of these reports is viewed through the prism of the exciting new discipline of "Peace through Health", whose evolution is scrutinized in this paper.

Medicine and Peace

There is a considerable history of connection between health practice and peace. Following the traditions of Louis Pasteur and John Snow, medical professionals have worked to educate the public about unseen and unforeseen risks to their health. The engagement of health professionals in the area of peace may benefit from public perception of them being intelligent, credible, unbiased sources of information.

The founder of the Red Cross, Henri Dunant, shared the very first Nobel Peace Prize in 1901 for the development of the organization and of the first Geneva Convention governing the conduct of war. The Red Cross has won the Prize three times since, in 1917, 1944, and 1963. Many other health organizations and individuals have won similar acclaim for their work in peace. In 1952, for example, Dr Albert Schweitzer won the Prize for his work in Africa (10).

IPPNW developed an international reputation with a public education campaign on the futility of any medical response to an all-out nuclear war, and promoted the idea that nuclear war could not be "won" in any meaningful way. The logical conclusion was that such a war should not be fought and that therefore, it was imperative to rid the world of these weapons for the benefit of all humanity (9). Speaking more convincingly than any other organization in the 1980s, IPPNW found the ears of leadership on both sides of the Iron Curtain. For this work, it was awarded the Nobel Peace Prize in 1985 (10).

Most recently, the International Campaign to Ban Landmines (ICBL), composed of many organizations, many of which medical, won the Prize in 1997; Médecins sans Frontiéres (MSF) won it in 1999 (10).

From the 1980s, the connections between peace and health have been actively promoted in a number of centers. The 1986 Ottawa Charter for Health Promotion considered peace as a fundamental condition for health, along with food, income, shelter, education, a stable eco-system, sustainable resources, social justice, and equity (11).

Croatian Medical Journal and Peace

Since its inception 11 years ago, this Journal has been a leader in showing what doctors can do for peace, particularly in the Balkans (12). In times of conflict, it has been renowned for looking at the hu-

manity medical professionals shared, insisting on publication of documents, without prejudice, from all groups of the former Yugoslavia. Based on experience in Croatia, Bosnia and Herzegovina, and Kosovo, Slobodan Lang (13-15) in the Challenge of Goodness I, II, III, has refined what might be done before (preventing), during, at the end of, and after violent conflict in terms of recognizing of rights, educating, monitoring, caring, redefining, and evaluating. Mirna Šitum in the Physicians in War column talks of finding love (16), dignity, and spirituality (17) in war situations and providing "adequate shelter for the souls of my soldiers" (18).

Peace through Health

McMaster University's Graeme MacQueen and Joanna Santa Barbara have pioneered the concept of Peace through Health, to bring a theoretical framework to this area of health practice (19). They define it as "an emerging academic discipline to study how health interventions in actual and potential war zones may contribute to peace" (20). Their initial concept suggests the following nine areas of activity (21,22).

Communication of Knowledge and Extension of Solidarity

IPPNW physicians have gone to Iraq to treat, evaluate systems, bear witness (23), and write (24) about the hundreds of thousands of deaths of children due to economic sanctions (25), which, with the endorsement of the UN Security Council, has been a deliberate instrument of western government policy ostensibly to pressure Iraq not to develop weapons of mass destruction. These missions have received tremendous press coverage (26). Such activities might be viewed on two levels identified by MacQueen: *Communication of Knowledge* and *Extension of Solidarity* (27). The latter is also implicit when medical professionals choose to risk their own comfort and well-being to enter war zones to treat victims or work in underprivileged or drug-infested areas in inner cities of the West. It is especially meaningful when one side of a conflict is relatively powerless.

Psychological Healing of the Individual and Society and Strengthening of Communities

The activities of MSF and ICRC in war zones contributes to *Psychological Healing of the Individual and Society* and *Strengthening of Communities* (28,29), which help maintain a structure for communities to rebuild when the world seems to be falling around them.

Broadening the Concept of Altruism

Although war leaders seek to depersonalize and dehumanize the "enemy", these health organizations attempt to personalize the opposition or potential victims by *Broadening the Concept of Altruism*. IPPNW used common professional contacts and friendships during the Cold War and later in the Balkans, to inform medical colleagues and the public that the consequences of war for "real people" on the other side would be serious (30).

Construction of Super-ordinate Goals

The *Five Days of Peace* campaigns in Central America in the late 1980s and early 1990s not only immunized hundreds of thousands of children, but were a manifestation of *Construction of Super-ordinate Goals*. Three to five day ceasefires would be held around Christmas time each year to allow the immunization of children, a common goal of each warring faction. As they found an ability to trust enough to develop this agreement, this may have set the groundwork for agreement towards lasting peace. This concept expanded from the region to other areas of the world in Asia and Africa (31).

Non-cooperation and Dissent

Non-cooperation and dissent where medical personnel, having learned lessons from at the Nuremberg trials, which highlighted the complicity of health professionals with atrocities in Nazi Germany in the name of obeying orders (32), refuse to participate in war campaigns launched by their governments and in some cases actually directly oppose them. This occurred during the Vietnam War (33), and is again taking place in the opposition to war on Iraq (34).

Diplomacy

As medical professionals gain prestige, they can work in the field of *Diplomacy* (35). The legitimacy of such activities conferred by the Nobel Peace Prize has allowed groups, such as the Red Cross, IPPNW, and MSF, who are seen as influential by the general public as well as providers of credible, unbiased information to engage in dialogue with political leaders.

Redefinition of the Situation

The final category suggested by MacQueen and Santa Barbara is *Redefinition of the Situation*. This is simply the insistence that an issue, previously defined as a military, strategic or political matter, is also a health issue. IPPNW proclaimed that war and nuclear war were medical issues. Physicians not only would treat the victims, but would die in disproportionate numbers during a nuclear attack (health professionals primarily live and work in city centers where hospitals are and which would be prime targets) (36). Similarly, the International Campaign to Ban Landmines de-legitimized the use of landmines as an instrument of war because of their indiscriminate medical consequences (29). It was the medical burden of suffering – physical, psychological, and rehabilitative effects on civilians, young and old, often years after war, which galvanized a public/NGO effort to ban these weapons.

Physicians for Global Survival, the Canadian IPPNW affiliate, goes further, boldly stating in its Mission Statement that "because of our concern for global health we, the Physicians for Global Survival, are committed to the abolition of nuclear weapons, to the prevention of war, to the promotion of non-violent means of conflict resolution and attainment of social justice in a sustainable world" (37).

Peace through Health Field Work

Peace through Health at McMaster University is not merely an academic discipline. Dr J. Santa Barbara has produced pamphlets on peaceful childrearing, media violence and war toys (37). The group has had field projects with both healing and evaluative components. Work has included epidemiological studies on the mental health of children in the occupied territory of Gaza, and in Sri Lanka, and an intervention on mental health and peace-building for war-affected children in Croatia (38). The Sri Lankan project evolved into the Butterfly Garden – a healing garden where children from several sides of ethnic divides come together to grow things, make things, sing, dance, and tell stories (39). The Croatian work was evaluated in a controlled trial and showed evidence of effectiveness in both mental health and reducing ethnic hatred (40). A current Peace through Health project for peace-building in Afghanistan began in refugee camps in Peshawar, Pakistan, even before the overthrow of the Taliban.

Medical Experience and Expertise

But can physicians, by virtue of their training and experience, help answer perplexing international geopolitical questions? And how might solutions derived from health care principles appear?

Learning from General Systems Theory

Ludwig von Bertalanffy, a Hungarian biologist, proposed the General Systems Theory in the 1940s (41). "There appear to exist general system laws, which apply to any system of a particular type, irrespective of the particular properties of the systems and the elements involved, ... a general theory of systems would be a useful tool and providing on the one hand, models that can be used in, and transferred to, different fields, and safeguarding, on the other hand, from vague analogies, which often have marred the progress in these fields" (42). His system has three core principles: ubiquity and unification principle, complementarity law, and system holism principle (43).

Bertalanffy believed that the overall fate of the world depends on the adoption by humanity of a new set of values, based on a general systems *Weltanschauung* (philosophy of life, or world outlook). "We are seeking another basic outlook: the world as organization. This [outlook] would profoundly change the categories of our thinking and influence our practical attitudes. We must envision the biosphere as a whole ... with mutually reinforcing or mutually destructive interdependencies. [We need] a global system of mutually symbiotic societies, mapping new conditions into a flexible institutional structure and dealing with change through constructive reorganization" (44).

He even felt that is could be used as an approach to the prevention of wars – military, economic, political, and cultural ones. The current concept of Conflict Transformation and Multi-track Diplomacy seems to be based in such ideas. "Conflict transformation refers to the process of moving from conflict-habituated systems to peace systems. This process is distinguished from the more common term of conflict resolution because of its focus on systemic change. Social conflicts that are deep-rooted or intractable get these names because the conflict has created patterns that have be-

come part of the social system. With the social system as the unit of analysis, the term *resolution* becomes less appropriate. Transforming deep-rooted conflicts is only partly about "resolving" the issues of the conflict – the central issue is systemic change or transformation. Systems cannot be "resolved," but they can be transformed, thus we use the term *conflict transformation*" (45).

In the light of systems theory, current approaches to terrorism appear equally simplistic, reactive, and shortsighted as the worst of medical blunders. In medicine, we have seen the folly of looking at organs or bodies in isolation, and failure when we treat superficial symptoms rather than applying a holistic approach, considering root causes – the underlying disease processes. The reliance of world governments on beefed-up militaries might seem analogous to the medical world's trust in a wonder drug or super antibiotic as a quick biotechnological fix. Working in collaboration has helped us much more than unilateralism (46). Ideally, the world community could learn from these historical lessons from the medical community to approach new international threats and challenges, the cancers in the international body politic.

Mental Health Approaches

The medical definition of security, of course, encompasses protection from physical harm but adds access to resources to meet basic needs along with the illusory psychological dimension. The "psychological" security, provided for some by nuclear weapons, is only at the expense of true security – real protection from physical harm and satisfying basic needs (47).

Robert Jay Lifton improved psychological concepts to explain challenges of living in the modern age (48). In *The Genocidal Mentality*, Lifton and Markusen (48) show the evolution in the psychology

of mass murderers beginning with a "diminished capacity or inclination to feel", followed by a general sense of meaninglessness. To him or her, the death or the possibility of the death of millions becomes "an abstract, bureaucratic detail, involving the calculation of military gains or losses, geopolitics or mere statistics."

Similarly, the presence of such unprecedented mass-killing devices, such as nuclear weapons, distorts our thinking; our lack of reaction to the horror of planning for nuclear war, he terms "psychic numbing" (49). It is a "disavowal of the truth …an attempt to disavow the existence of unpleasant reality", "a form of desensitization … an incapacity to feel or confront certain kinds of experience, due to the blocking or absence of inner forms or imagery that can connect with such experience." (50,51). Thinking of nothing of planning attacks to kill millions is similar to the changes required to allow "civilized" Nazi society to kill millions.

Klain, examining the post-conflict situation in the former Yugoslavia, suggests ways of societal healing from collective post-traumatic stress disorder (PTSD), replacing mental constructs of prejudice, hatred, revenge, guilt, and shame, with apology and asking forgiveness, ultimately leading to reconciliation (52).

Mental health practitioners have developed theoretical frameworks and practical approaches to deal with interpersonal violence and family violence. Joanna Santa Barbara shows how the concept of a cycle of violence might be applied to international conflict situations (Fig. 1).

These approaches also suggest appropriate interventions at various stages in the development of violence as can also occur in family systems and individual trauma.
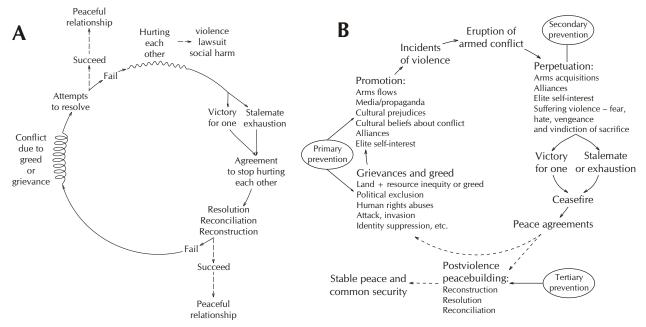

Figure 1. Cycle of violence. **A**. Interpersonal or domestic violence. **B**. Civil strife and war. According to Dr. J. Santa Barbara (2003, personal communication).

Public Health and Preventive Medicine Approaches

Public health models of prevention and behavior modification might also be applied to international conflict prevention and transformation. Doctors are only now learning prevention in a systematic way and viewing prevention at primary (addressing root causes), secondary, and tertiary stages. The family medicine and psychological literature is now addressing behavior modification strategies, assessing intervention in the context of stages of readiness for change (53,54). There are possibilities of an epidemiological or public health approach to the problems of small arms (55), and the effects of sanctions and war on the health of Iraqis (25).

Ulrich Laaser (56) describes the New Public Health, with potential for healthy and therefore less aggressive societies. Its core disciplines are health promotion, environmental health, and health care management based on advanced epidemiological methodologies. Essential to the reduction of violence are equity, participation, subsidiarity, and sustainability.

Redefining security and defense in terms of human well-being, looking at escaping chains of violence and abuse, approaching prevention and healing our planet in a holistic way might help us escape a deadly cycle, which has led to nuclear proliferation, and provide an alternative approach to dealing with other international security threats. The report of the International Commission on Intervention and State Sovereignty (ICISS), *The Responsibility to Protect* (8), shows very clearly the congruence between concepts of human security and the principles of public health practice.

International Commission on Intervention and State Sovereignty: Responsibility to Protect

This paper was sponsored by the government of Canada and modeled on commissions such as Brandt, Palme, Brundtland, Canberra, with illustrious commissioners from around the world, including former heads of states, international legal experts, NATO generals, and UN officials. It was intended to respond to the question posed by people in the West: with all of our military power, why did our governments and the UN fail to prevent the genocides in Rwanda and Sierra Leone? How should we have acted with worries about genocide in Kosovo or East Timor? With current concepts of state sovereignty, could the international community have acted earlier in Bosnia and Herzegovina? The conclusions of the ICISS Commission are startling, especially because of their parallels with medical principles.

Instead of asking when the international community has the right to intervene, the Commission started by saying that the primary responsibility of a nation state is to protect all of its people. When the state is unwilling or unable to do so, that responsibility falls to the international community. This seems analogous to a parental obligation to children and the obligation of society, and in particular, the responsibility

of health and social services professionals to intervene when parents fail to act in the interests of a child. Whereas perceptions of rights and duties of parents may differ slightly from country to country, this principle has been applied not only to cases of child abuse, but also to such ethical dilemma as parental refusal of medically advisable cancer treatment or blood transfusions.

The Responsibility to Protect casts the principles of Just War Theory in a form with clear parallels to health care. Much as physicians must have the right intention, holding the welfare of the patient above self-interest or goals of the state, the primary goal of the intervention should be the protection of the people, to halt or avert human suffering, not to secure of the interests of another state.

The requirement of *Primum non nocere* ("Do no harm") must guide any intervention. There should be reasonable prospects of success in halting or averting the suffering which has justified the intervention, and as in medicine, the consequences of action should not likely be worse than the consequences of inaction. The planned military intervention should be the minimum necessary to secure the defined human protection objective, and the means are to be proportional in scale, duration, and intensity. Only after all non-military means have been exhausted (e.g., economic incentives, political and diplomatic measures, human rights observers, trade missions, cultural exchanges, and education, all to promote compliance and integration of the offending party) as a "last resort", should the most radical and destructive measure, a military response be considered. A "Just Cause Threshold" must be present – serious and irreparable harm occurring to human beings, or imminently likely to occur. This would include large-scale loss of life or large scale ethnic cleansing, killing, forced expulsion, and acts of terror or rape (57).

As with physicians, the acts of interveners must be strictly regulated. The Commission offers criteria under which a military response may be countenanced. It must be under "right authority" conforming to international law, the UN being the most appropriate body. Further it states that this would be "better assured with multilateral operations, clearly supported by regional opinion and the victims concerned," ie, respectful of the "patient" (or state) autonomy and, when that cannot be exercised, it must be overridden only with proper safeguards.

The international community is charged not just with the responsibility to react, but to prevent and rebuild, "...prevention being the single most important dimension of the responsibility to protect." Rebuilding has been considered integral by Western governments to their intervention in Afghanistan (58). These elements correspond very directly to preventive health care, curative treatment, and rehabilitation, with a strong emphasis on prevention.

Of course, medical ethics and principles are not alone in forming the foundation of Commission principles. Many of these are found in the world's great religions, and documents such as the Universal Declaration of Human Rights (59).

Collateral Damage

Drawing on evidence from the last Gulf War and wars on former Yugoslavia, Afghanistan, Somalia, and Panama, and using conflict scenario favored by Western military specialists, General Peter Gration, the former Australian Chief of Defence Forces, considers this to be "a coldly factual report by health professionals, who draw on the best evidence available, and in every case either show the range of credible estimates, or the most reliable estimate, erring on the side of caution" (60). *Collateral Damage* arrives at an estimate of the likely human consequences of a war on Iraq. In the first three months of the battle alone, beginning with massive aerial bombing of Iraq's infrastructure and cities, followed by a ground assault, it predicts the number of likely casualties at 48,000 to 260,000 direct deaths. With ensuing civil war, breakdown of food distribution, and indirect mortality, this total could reach a million. If warfare were to escalate to the use of nuclear weapons, the death toll could reach 4 million. Additional deaths due to continued regional instability were not considered in this analysis.

The report also touches on systemic effects of war on human health and well-being, including mental health and damage to the social fabric. It attempts to address the equally important environmental and economic impacts. In 1991, the environmental damage related to oil spills over land and sea and toxic smoke from burning oil wells was incalculable (61). Impacts on sensitive desert ecology might result from troop movements, and the use of landmines, cluster bombs, and depleted uranium. In the new war, US military costs are projected to reach $50-200 billion (British expenses would be in the billions of pounds) related to direct expenditures of the war and security in the immediate aftermath, indirect costs include those of rising oil prices and a possible global recession. *Collateral Damage* points out that civilian costs of this recession would be enormous for the developing countries and borne most acutely by the poorest. The penalty of the last war and of sanctions for Iraq was even greater, with its gross domestic product (GDP) falling from $66 billion in 1989 to less than $245 million (or 200-fold) by 1992. If the case of Afghanistan is a model, follow-through from the international community on commitments to developing democracy and rebuilding may be far less than promised (62,63).

While physicians may be present to do a "post-mortem", as in the case of the Harvard Study Team after the last Gulf War (64), *Collateral Damage* is unique in using health science knowledge to contribute to decision-making before launching war. At the very least, it uses epidemiological knowledge to allow the public to rationally weigh the pros and cons of war from a health perspective. At best, it allows us to evaluate the consequences of a "pre-emptive war" and engage in primary prevention by choosing non-military means to deal with perceived threats. One might argue that war is too serious a matter to be solely left in the hands of politicians and generals. In any case, *Collateral Damage* demonstrates that a population health perspective brings important data and values to a foreign policy debate and has attracted the attention of medical and mainstream media (65).

Table 1. Health professional roles in working for peace*

Health professional role	Scope of activity	Examples (ref. No.)
Scientist, scholar, and teacher	Communication of knowledge	Médecins Sans Frontieres (MSF) in war zones (28) International Physicians for the Prevention of Nuclear War (IPPNW) – humanitarian consequences of nuclear menace (36)
	Public health and prevention models	Peaceful childrearing (37) Small arms work (55) Cycles of violence (Fig. 1) "Responsibility to Protect" (8)
	Holistic approach	Physicians for "Global Survival Mission Statement" (37)
	Redefinition of political and military issues as medical ones	Nuclear war and landmines as medical issues (29) Nuclear weapons as addiction (47,49) Medical definitions of security and power
	General systems theory	Learning from medical historical experience
Healer	Psychological (and spiritual) healing of individual and society	Posttraumatic post-conflict healing (52,66) Physician in War (16-18) McMaster's Peace through Health projects in Afghanistan, Sri Lanka, Croatia, Gaza (20)
	Strengthening of communities	MSF presence in War Zones (28) McMaster's Peace through Health projects in Afghanistan, Sri Lanka, Croatia, Gaza (20,41,58,62,63,66)
Humanist	Evocation and broadening of altruism	IPPNW collaboration across the Iron Curtain (9) CMJ publishing from all ethnic groups (4,12)
	Extension of solidarity	Working in war zones, inner cities (28) IPPNW missions Iraq and former Yugoslavia (25,30)
	Professional ethics	Non-collaboration with Torture Lessons from Nürenberg; physician complicity with Nazi activities (32,48)
	Construction of super-ordinate goals	"Five Days of Peace" (31)
Advocate and activist	Non-cooperation and dissent	Opposition to wars in Vietnam and Iraq (3,25,33) Protesting Nuclear Weapons Programs (9)
Diplomat, mediator, and counselor	Conflict transformation, mediation, and negotiation	Nobel Peace Prize winners influence with political leaders (45)

*Adapted from ref. 21.

Putting Collateral Damage and Responsibility to Protect in a Revamped Peace through Health Framework

It seems that the roles of health professionals' activities in the domain of peace fall in four broad categories: 1) education, knowledge, experience, and approach; 2) reputation for humanism; 3) role as advocate and activist; and 4) acknowledged role as healers (Table 1). This concept incorporates the categories defined by MacQueen and Santa Barbara (19) and expands the definition, particularly in terms of physician expertise.

Collateral Damage and *The Responsibility to Protect* show how we may actually work to heal the planet. *Responsibility to Protect* seems to be evidence for the validity of General Systems Theory. It may represent a medical model for the prevention and appropriate treatment according to ethical concepts, principles, and practice of medicine. *Collateral Damage* ostensibly represents an epidemiological analysis of war, but implicit is the role of health professionals as healers of potential victims and humanists, which gives us credibility as we act to prevent damage of a disastrous war from a Public Health point of view. The values of state protection, dominance, acquisition, or expansion play no role in decision-making in the principles of ideal medical practice. Flying in the face of forward self-defense and pre-emptive strikes, the two reports together suggest guideposts as to how physicians and other health professionals might contribute to international debates defining and responding to global threats.

Conclusion

Einstein stated, "The splitting of the atom has changed everything except the way we think. Thus we drift toward unparalleled catastrophe. We shall require a substantially new manner of thinking if mankind is to survive" (49). The Skopje Declaration on Public Health, Peace & Human Rights states, "We believe that public health constitutes one basic element and practical ingredient, for mankind's hope for the future" (67). Prevention and healing on a global scale require clear ethical principles for action, just as they do in the personal practice of medicine.

Rudolf Virchow, the renowned German anatomist, coined the phrase, "Politik ist weiter nichts als Medizin im Grossen" – Politics is nothing more than medicine on a grand scale (68). Virchow would argue that we have a role, even a responsibility, to put these ideas forward!

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Correspondence to:

Neil Arya

99 Northfield Dr. E. #202

Waterloo ON N2K 3P9

Canada

neilarya@hotmail.com