

Anti-Personnel Landmines: The Next Bold Step...

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*"And they shall beat their swords into
ploughshares, And their spears into
pruning books..."*

Isaiah 2:4

Alas, we have not yet seen the prophecy unfold to usher in an age in which we take to the fields or the vineyards rather than to the battlefields to slaughter our neighbour. Until that great day dawns, humankind will likely continue to search for creative ways of wreaking mayhem and murder amongst real or perceived enemies. If, as Sir William Osler said, man can be distinguished from the animals in his propensity to take pills, it also must be said that we are well unique in our ability to invent ways to maim and kill each other.

As real and as sad a fact as this may seem, some of us may wish to throw up our hands in despair, take to the hills, or — worst fate of all — bury ourselves in daytime television. But, there may be cause for hope. Hope at least that sometimes good can come of collective and decisive action; hope at least that we *can* sometimes influence the course of history; and hope that a good cause, idealistic and utopian as it may appear to be, can trump over global politics at several levels. Some of this hope, at least, can come out of the recent experience in the process that focused on the manufacture, sale, deployment, and horrid consequences of anti-personnel landmines (APMs).

Among the most pernicious of humankind's devilish means of destruction, anti-personnel landmines are no respecters of persons. They are indiscriminate in their choice of victims, maiming and killing women, children, soldiers, and civilians alike. The wounds produced by APMs are difficult to treat and require more frequent surgical intervention and more blood transfusion,^{1,2} than other wounds. Death from

these injuries is painful to the victim and terrible for families and friends to experience. Survivors are left with indescribable challenges simply to survive, let alone continue as useful and productive members of society valued for the contribution they once may have made to their family and villages.

The sowing of landmines amid populations, usually poor rural villagers, leads not only to death and terrible disability, but to profound effects upon the public health.^{3,4} Agriculture and the production of food are impaired because, not only does land become unusable, but farmers and helpers, as well as their beast of burden, frequently are maimed or killed; lack of food then leads to malnutrition and general weakness of the population. Mines frequently are placed around sources of safe drinking water, effectively forcing people to rely on contaminated wells or reservoirs, with resultant increase in diarrhoeal diseases and water-borne infections. And on it goes.

The legacy of APMs slowly began to etch itself into the world's consciousness first through the vigorous activity of the International Committee of the Red Cross (ICRC), UNICEF and other agencies of the UN, and many Non-Governmental Organizations (NGOs). Several of the NGOs were formed specifically to respond to the terror of APMs this "weapon of mass destruction in slow motion."⁵ Their efforts were brought together in what has been called the "Ottawa Process", named after Canada's capital in which was held the decisive conference in October of 1996, that designed a strategy to implement a complete ban on the weapons. At that time, the Foreign Minister challenged the world community to work toward such a ban and to return to Ottawa the next year (December 1997), to sign a treaty. Meetings in the Ottawa process occurred within the next 12 months in

Vienna, Belgium, and Norway, and in December 1997, 156 countries, the ICRC, the UN, and NGOs gathered in Ottawa for the Treaty signing Conference.

By September 1998, 129 states had signed the *Convention on the Prohibition of the Use, Production, Transfers and Stockpiling of Anti-Personnel Landmines and on Their Destruction*, and 34 had ratified it. Ratification by 40 states is necessary before the ban enters into force. This was the first time ever that a weapon in widespread use was banned under international law.

International arms' prohibitions...some history...

The concept of *limiting* the choice of how and with what means a state bashes another in formal or undeclared warfare has been enshrined for centuries in treaty and custom. The *Hague Regulations* of 1907 formally reaffirmed this principle of restricting the *methods and means* of warfare, and this was reiterated by 147 states in the 1997 *Additional Protocol I to the Geneva Conventions of 1949*.^{6,7} Both the Nuremberg Tribunal and the International Court of Justice recognized this principle and considered it basic to its judgments.⁸

For more than a century, there have been attempts to ban the use of weapons of war judged to be particularly pernicious because of their effects on the victim. However, "pernicious" often was in the eye of the beholder; and objective system of judging weapons as "inhumane" or of declaring them candidates for banning has been suggested only within the last year or so. The "feeling" of disgust at the effect of an exploding bullet in 1868 led to a proposal by the Russian Tsar to ban such a missile, and the *St. Petersburg Declaration* resulted. There followed in 1899, international bans on the "dum-dum" bullet (which deformed on impact with tissue, and caused grievous wounds) poison gas (biological and chemical weapons) in 1925, and laser weapons designed to blind in 1995.

Key to achieving international condemnation of a particular type of weapon has been the "perception" that the use of such a weapon would, by any reasonable person, be considered abhorrent and uncivilized. As vague and nebulous as this may seem, the influence and importance of "custom", "humanity", and "public conscience" were enshrined in international agreement beginning with the first Hague Peace Conference in 1899 with what has been called the "Martens Clause."⁷ It stated that civilians and combatants remain "under the protection and authority of the principles of international law derived from established custom from the principles of humanity and *from the dictates of public conscience.*" (italics added) The principles of the Martens Clause have been reiterated repeatedly in international humanitarian law, as has been the fact that public opinion is an important element in the formation of public policy in the field of international affairs.

The lessons from landmines...

The influence of public opinion, the media, and non-governmental organizations on the creation of public

policy — even in the field of international law — never has been more evident than in the process that led to the international treaty to ban APMs. Although it might be argued that the initial impetus for a total ban came from recognized and established international humanitarian agencies (ICRC, UNICEF, UN, etc.), the influence of other NGOs not usually associated with international politics or law, must be regarded as pivotal in achieving the Ottawa Treaty of 1997. Grassroots meetings, media "happenings", school curricula, petitions, and the involvement of millions of average citizens from around the world brought attention to the issue and emphasized the "humanity" of the cause. The skillful work of the NGOs in mobilizing public opinion through education, public affairs messages, and alliances with celebrities was crucial in the campaign. Testimony to the importance of their work was eloquently expressed by awarding the Nobel Peace Prize for 1997 to the International Campaign to ban Landmines.

Notwithstanding the success of achieving the Ottawa Treaty, the war against APMs has only begun. We lack data on many of the basic questions that must be answered before we truly can make a difference in the lives of survivors of APMs or the populations so tortured by their further use and deployment. The signing of the Treaty may lull some into a sense that we have completed the task, and it is time to go on to the next challenge. Nothing could be further from the truth. But besides the work that must be done to alleviate the devastation of the APMs, there is a larger question looming, the answer to which may, in part, lie in the lessons of landmines.

Anti-personnel Landmines...the next bold step...

We have learned from the struggle to rid the world of these diabolical weapons that indeed, public opinion can be mobilized in a positive way, and that the leadership required to do so can create a force to be reckoned with even in the maze of global politics. But the success of the process of achieving a ban on these weapons begs the greater question — what now? Do we wait for the next diabolical weapon to appear on the scene, be deployed in wide use, and then come running into the streets to register our humanitarian outrage? Surely, there is a better way.

The question even is more pressing for physicians and health-care professionals. As has been eloquently stated by the World Medical Association, weapons — instruments designed to inflict injury to the human body — by nature are abhorrent to the healing professions.⁹ But, we also live in a real world, with stark realities staring us in our collective face, and the best we probably can do is to limit the damage and suffering done to human kind by our beating up on one another. Weapons and their effects on the body, are essentially a *health* problem, and we are obliged to embrace broad solutions encompassing not only the *treatment* of the disease of "wounding", but the *prevention* of the "disease" in the first place. The "treatment" of the APM "disease" was

the attempt to improve on the management of wounds and the rehabilitation of survivors and the communities "infected" with the plague of mines. The "prevention" of the APM "disease" was twofold — an international ban (blocking the source and "spread" of the causative agent, and demining, or removing the causative agent a' from coming contact with the "host" — akin to disinfecting a community.

In the matter of APMs and the process used to achieve the Ottawa Treaty banning their use, we focused on dealing with the disease after it began to "spread" and created havoc in some 64 countries. We also focused, as in the past, largely on the *type* or the technology of weapon; in this case, one that led to the indiscriminate wounding of innocent civilians. The Ottawa Treaty, as did the St. Petersburg Declaration of 1868, outlawed a *type* of weapon rather than the *effect* the weapon would produce on the human body. There is an important difference here. The St. Petersburg Declaration banned the exploding bullet, which soon was replaced by high-velocity missiles that produced far more terrible wounds than ever would have been contemplated by the Tsar or his courtiers. Technology allowed us again to side-step the intent of the ban and dodge yet another good intention. The Convention of 1995 banning blinding laser weapons did the same thing — it did not outlaw *blinding* of the enemy, it prohibited *laser weapons* which blinded the enemy. When new technology is developed that produces the same effect on the eye (irreparable disruption of the retina) but is not a laser, we again will be back at the table or running out into streets.

The SIrUS Project...effect before technology

To address the need for an objective and "non-judgmental" system to evaluate the "acceptability" of weapons — actual or contemplated — the International Committee of the Red Cross, under the leadership of Dr. Robin Coupland, has devised and undertaken the "SIrUS Project". This initiative, "Superfluous Injury or Unnecessary Suffering" (SIrUS), reflects the desire to judge weapons and their "acceptability" in international law by the *effect* on the human body of the weapon rather than its inherent nature or technology. A group of experts in the field of weapons, medicine, law, and communications has agreed on four criteria as a base for determining whether or not a weapon would cause "*superfluous injury or unnecessary suffering*", and hence, could be the focus of an international ban.⁷ The assumptions upon which their criteria are based include the following:

- 1.) The effect of the weapon, rather than its technology is the primary consideration;
- 2.) The effects of weapons on people and individuals are measurable;
- 3.) The effects of conventional weapons on health are well-documented, and can be used as a baseline for determining the effects of future weapons on humans; and
- 4.) The degree of suffering from a weapon is increased if there is no treatment available.⁷

A weapon would be considered as causing "*superflu-*

ous injury and unnecessary suffering" when used against humans and causes:

Criterion 1: Specific disease, specific abnormal physiological state, specific abnormal psychological state, specific and permanent disability or specific disfigurement;

Criterion 2: Field mortality of more than 25%, or a hospital mortality of more than 5%;

Criterion 3: Grade 3 wounds as measured by the Red Cross wound classification; and

Criterion 4: Effects for which there is no well-recognized and proven treatment.

According to the analysis provided by the ICRC,⁷ by way of example, Criterion 1 and possibly 2 and 4 would apply to chemical and biological weapons; Criteria 2 and 3, to exploding bullets; and Criteria 1 and 4 apply to blinding lasers; APMs would be covered under Criteria 1, 2, and 3.

It is important to recognize the SIrUS system of measurement changes fundamentally the way in which we have approached international bans in the past. No longer would we *primarily* consider the *technology* of a weapon, but rather we would focus on the *effect* of it on the victim. But there remains much difficulty associated with the issues surrounding weapons and wounding. As physicians and people in the health professions — healers, if you will — the use of weapons and the destruction they entail inherently are abhorrent to us. As the framers of the SIrUS project put it,⁷ "*Can a weapon cause injury which is not superfluous? Is there such a thing as unnecessary suffering? These questions pose a moral problem for pacifists, the medical professions and those who believe in complete disarmament.*"

Despite these reservations and the individual philosophies many of us hold, the reality faces us of weapons of such devastation as to be almost unimaginable. We cannot ignore the horrors of unfettered technology designed to produce weapons targeted genetically against specific societal or racial groups,¹⁰ the ever-present threat of nuclear blast, or other means of death and destruction equally horrid and well within our human capability. Our voice as physicians and those faced with treating grievous wounds needs to be raised to influence public opinion as was done so successfully during the campaign against APMs. As health professionals the public will listen to us; we have "been there" to deal with the carnage of disasters and devastation, sometimes due to war. We are obliged to lead, both individually and collectively, through our formal organization.

The SIrUS Project may well be a tool that can help us, as physicians and other health professionals, to bring the matter of weapons of war into the public debate that is so badly needed. The legacy of the landmines's campaign not only is the reduction of the havoc wrought by APMs, but it may well be the lessons of effective advocacy we have learned in the *process*. We have an opportunity to help mobilize public opinion to stigmatize both the invention of weapons that produce horrible suffering and disability and those responsible for such uncivilized and illegitimate activity.

Given human nature and our capacity to kill and wound each other, it is doubtful that we will, on our own, "study war no more." But our duty as physicians is to relieve human suffering as best we can, and to prevent death and disability. Our efforts to rid the world of the scourge of landmines may mean that many lives have been saved and the quality of others improved. Our further efforts to reduce the risks of the horrors of war may seem utopian and idealistic, but there are legacies to build on, and history *has* been made by humble people.

And, whereas we may not yet be ready to forge our new tools of ploughshares and pruning hooks, when faced with the alternatives, we may view the furrows in the fields as more inviting, and the vineyards more in need of pruning.

Note: Further information on the SIRUS Project may be obtained from the internet site of the International Committee of the Red Cross (Comité international de la Croix Rouge): <http://www.icrc.ch/>

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