Thursday, 24 June: 'Health & environmental costs of militarism’
Rosalie Bertell, Ph.D., G.N.S.H.

Abstract: There has been a fundamental change in the nature of war and militarism since World War I, and this change has escalated out of control since World War II. The use of toxic gas as a weapon, poisoning of water ways or air, and using chemicals in warfare broke the taboo against widespread and indiscriminate killing of non-combatants. This trend escalated during WW II through carpet bombings, the nuclear bombs and the V2 rockets. Then chemists, using the chlorine gas, separated for a WW I weapon, developed agent-orange and an array of pesticides, herbicides and defoliants which attacked both people and the living earth itself. The military used these in the Viet Nam War. Extensive use of land mines in Korea and elsewhere, prolonged wars beyond the truce, and now we have the firing of radioactive waste, depleted uranium, at an enemy prolonging the mutilation and killing for generations after the war is over. The production, waste, testing and use of these weapons kill people and pollute the earth. Through them, addiction to violence as a means of resolving international disputes has revealed its ugliness and self-destructive nature. The deaths occur both among the winners and losers of the war, and the earth itself is placed in jeopardy. War-making, including that now under preparation, is using the earth system itself in order to disrupt global weather and international communication. At risk is the human ecosystem and habitat on this planet. Do we wish to continue to be the passive cooperators with this violent self-destructive addiction and false concept of national security which leads to global insecurity? If not, how do we extract ourselves from this addiction?

Toxic Spin Off of War:

Dorland’s Medical Dictionary defines an addiction as the “state of being given up to some habit”. Although we humans have developed local, national and international police systems and courts to judge crime, on the global level nations have the bad habit of resorting to violence to “solve” all disputes. For example, The World Trade Center disaster on 9/11 provided a unique opportunity to engage Interpol, the international police force, and bring indictments in the new International Criminal Court. Instead, the war against terror was launched. Terror activities are first of all crimes. They need to be countered by a police force, not an army.

Solving all international crises through vigilante direct action, has given rise to the development of lethal weapons, destructive beyond all imagination, in the most powerful nations. The victims of this threat adopt, as the only possible way of self-protection and retaliation, terrorism and suicide. Like all bad habits, the habit of choosing violence as a first (and only) response has manifested itself as the ultimate self-destructive policy for nations. Although we are used to thinking of drug or alcohol dependency as addictions, there are also social or behavioral dependencies, for example to gambling, which do not
involve substance abuse.

Physical dependence is defined as a state of adaptation to an abuse accompanied by development of a tolerance and manifested by a withdrawal or abstinence syndrome. Tolerance is defined as “the need to increase the abuse progressively in order to produce the effect originally achieved by smaller doses” - think of the “block-buster” of World War II, which literally destroyed a city block. The 9/11 plane-bomb was a block buster. The military calls the Hiroshima and Nagasaki bombs “city busters” and the megaton hydrogen bomb set off in 1954 in the Marshall Islands a “Suburb Buster”. Note that even the mention of non-violent response to an attack is met with both disbelief and aggression by the population at large.

A withdrawal syndrome is “untoward physiological changes that occur when the abuse is discontinued or when its effect is counteracted by a specific antagonist”. The changes include fear, irrational behavior, disorientation and rash, even suicidal actions. Addictive abuses can be recognized by the dysfunctional and self-destructive behavior which they generate. An example is the Patriot Act in the U.S., which undermines the very democratic protections of the public it claims to protect. An abuse also claims the lion’s share of wealth and natural resources, depriving others of needed health care, food and shelter.

Although we rightly are horrified by the suicide bombs carried even by women and children, the West proscribed tactical nuclear weapons for use against an attacker in Europe. These tactical nuclear weapons were suicidal for the one who detonated them.

Factors leading to addiction or habituation appear to include peer or group pressure, and emotional distress which is alleviated by the abuse. We “feel better” when we strike out after a devastating blow like the 9/11 world trade center disaster. We feel like we are “doing something” or “getting even”. Factors involved in the mechanisms leading to abuses, including violence, are sadness, low self-esteem, social alienation, and
environmental stress, especially if accompanied by feelings of impotence to effect change or to accomplish goals. How better to describe the motivation of the so called terrorists!

And what should we think about the pathological fear of nuclear retaliation in the nation which actually used the bombs on a civilian population? We might wonder why this nation is still promoting nuclear technology throughout the world, resisting all attempts to disarm and now developing smaller, more usable nuclear bombs. From a national security perspective, such behavior is irrational and counter-productive.

Global violence is not limited to the super power arms race, but even involves child victims and child warriors. The United Nations Study of the “Impact of Armed Conflict on Children”, released in 1995, estimated that 500,000 African children died during the previous year from lack of health care, food, water and shelter, resulting from armed conflict. In Sierra Leone, some of the worst atrocities were committed by some of the estimated 2,500 children who had taken up arms. In Liberia, 6,000 children, who were recruited or forced, make up the “small boy” units on the front line.

A world wide Congress of Scientists and Academics for a World Without War, met in Madrid in July 1999. They launched a Manifesto which was signed by thousands of prominent people, Nobel Prize Laureates, scientists and scholars around the world. In it they stated:

“Violence is a mistaken response, not an expression of the intrinsic evil of [humankind]. We have to decide whether every human being on this planet is born with the pathological features of this peculiar mental disorder, or conclude that wars are not mechanical, uncontrollable, natural phenomena like hurricanes or earthquakes. Wars are linked to the interests and intentions of specific individuals and groups. War is considered, planned and decided upon by a handful of people who are sick with cruelty and
thirst for power and money. Using arguments that are immoral, and therefore invalid, these few people involve entire peoples in the fulfillment of their plans. This immorality has consequences: despair, loneliness, illness, hunger, mutilation, insanity, destruction and death.”

It seems obvious now, looking back, that even though Saddam Hussein was a despot, we had no moral authority to invade Iraq. Both the U.S. and U.K. were misled by their elected leaders, whose zeal was based on flimsy data, and a thirst for oil and money.

Just five years after this Manifesto, those confirmed warriors, addicted with violence, were trying to extend their destructive power to the control of hurricanes and earthquakes. These are to become the secret weapons in the war without end against terrorism. Only the refusal of the public to cooperate with this evil can stop it. There can be no war without people who design, make, test, sell and use the weaponry!

**Costs of War in Human Life and Civilization:**

The “Bread not Bombs” slogan has been around for centuries, and yet the money spent on armaments and waging war has constantly escalated, becoming greater globally than the total economy of many nations. The official cost of the recent Iraq war, according to the Official U.S. Government Office of Budget, is over $115,000 Million and climbing. With this money we could fund the global anti-hunger efforts for four years.

Sometimes we forget to count the real cost of war in human lives. At least 1,000 coalition forces have been killed in Operation Iraqi Freedom, 800 dying since the war officially ended 1 May 2003. The rate of wounded to killed is now almost 6 to 1, meaning that some 6,000 are wounded. The killing of the Iraqi people is even more distressing. An AP release on 30 April 2004, reported that 1,361 Iraqi women, men and children, mostly civilians, were killed during the month of April alone. This is ten times the number of coalition forces
killed in the same period. The average number of civilian deaths is 100 times the coalition deaths. These Iraqi deaths, approximately 100,000, are seldom covered in our media. We may need to develop our own media! The toll in disease, mutilation, destroyed lives and war-related birth-defects is unknown, but it may be as high as 600,000. Medical evacuations from Iraq have been in the range of 23,000.

New statistics released by UN agencies earlier this month showed that more than 670 children have been killed in the past four years of the Israeli-Palestinian conflict -- 573 Palestinians and 105 Israelis. Close to 2000 Palestinian children have been arrested, interrogated and detained, with 337 currently in jail. Nearly 1500 school days were lost.

In the U.S. alone, after the first Gulf War, there were 700,000 veteran lives disrupted with so called Gulf War Syndrome. By 1996 about 12,000 fit young veterans had died, many more have died since then, and many veterans had children born with birth-defects. Cancer rates and birth-defect rates increased dramatically in Iraq, and between the two wars some 500,000 children died due to the sanctions.

This is only a small portion of the cost of recent wars. Millions have been slaughtered in Africa, and there is currently genocide in Sudan. The world can never forget the slaughters in Rwanda and Burundi, Guatemala, Nicaragua, Chile and Angola.

There are other indicators of the death orientation of our global community: rape of women, abortion, abandonment of children to the streets, failure to education and care for the health of children, trafficking in women and children for slavery or organ transplants, promotion of illegal drugs for money. I consider all of these self-destructive drives in our society as part of the escalating tolerance of war and violence.

Expecting society to engage in arts and music, develop law and civil society, or even organic farming and environmental restoration, in the midst of this killing and destructive
behavior is to have one’s eyes closed and one’s head stuck in the sand. The sickness has gripped the whole of society - whether the addicted or the passive cooperators. We all need help to disentangle our culture from this abnormal state of affairs.

**Tolerance of and the Progressive Violence of War:**

The era of conventional war ended with the dropping of two atomic bombs, one on Hiroshima and one on Nagasaki, at the end of World War II. One hundred forty six thousand (146,000) immediate deaths of women, children and elderly (those unable to join the military effort), with subsequent radiation related deaths for decades after war, broke the myth of combat between two opposing armies. The atomic bombs were 1000 times more destructive than the block-busters of World War II or the planes with their jet fuel, which flew into the World Trade Towers.

In 1952, when the hydrogen bomb called Bravo, was set off in the Pacific, Edward Teller announced that the size of the bomb was the equivalent of 10 million tons of TNT, almost one thousand times the size of the Hiroshima bomb. Albert Einstein, Niels Bohr, Leo Szilard and Robert Oppenheimer, part of the Manhattan Project which developed the bomb, were among those who recognized and proclaimed that these “doomsday machines” demanded a new “calculus of Peace” if the planet were to survive.

One former sailor, who witnessed the megaton blasts in the Pacific during the 1962 tests, told me that he thought the world stopped turning momentarily. When he saw the total sky covered with black angry clouds he thought it was the end of his planet home. During the 1950’s it was generally acknowledged that use of the atomic bomb against any nation would cause such suffering and destruction of the infra-structure, environment and social fabric, that it would destroy civilization itself.

Since then, nuclear bombs have become almost “conventional” in the popular mind,
especially the minds of those born since 1945. I remember during the Iran hostage crisis, seeing T-shirts being sold on the streets of Washington, DC, with the slogan: “Nuke the Ayatollah”.

Today we have widespread stock-piling of biological, chemical and nuclear weapons of mass destruction, and the U.S. is engaged in developing a so called space shield, laser beam weapons, manipulation of the ionosphere, ionospheric heaters capable of disrupting weather and communication globally, manipulation of weather as a weapon, and ability to cause volcanoes to erupt and earthquakes to occur at will. Russia, China and perhaps other nations are already joining the space race. Climate change and violent weather are resulting from this experimenting, and our ignorance and disregard of the needs of the planet. In the most recent wars in Iraq, Kosovo and Afghanistan, the US and UK have used weapons fabricated with radioactive waste, depleted uranium, which causes disease in their own military forces, as well as the military and civilians in the so-called “enemy” territory. This contamination with micro and nano-meter size particles is creating a pollution which is disruptive of all biological systems. It is insoluble and non-biodegradable when inhaled. Women and children will suffer most from this diabolical weapon: children because of their undeveloped immune system and women because of their radio-sensitive tissues, breast and uterine. This indiscriminate killing and maiming of civilians will continue long after the war is over.

What more absurd escalation of violence can we imagine? Our own military is being killed by our own weapons! There are no more barriers delineating non-combatants or even sparing nations which are not party to the war. Air and water circulate freely on this naturally recycling planet.

**War also Destroys Scarce Natural Resources:**

The destruction of infrastructure for cities, the waste of scarce resources for weapon-
building; the reconstruction of bombed out buildings, polluting ecosystems and habitats and the stealing of these natural resources from future generations, are not frequently mentioned when discussing war. War causes disruption of weather patterns and destruction of agriculture. With the help of global satellites, the natural resources of our planet home have been estimated, and the rate of depletion of those resources relative to Earth’s ability to replenish them has been calculated [See Sturm, Wackernagel and Muller, 1992. 1997 and 2000].

A fair share of the global resources, with some resources saved to preserve bio-diversity, is about 1.7 hectares of mixed materials - fisheries, forests, crop land, etc. - per person per year. A nation’s ecological foot print can be calculated as the consumption of natural materials per person per year times the size of the population. The United States, with 6% of the world’s population consumes 25% of its natural resources. Global consumption on this scale would require four planet earth’s. Yet millions of U.S. citizens are homeless and without health insurance. Certainly many of these resources are going into weapons and star war scenarios, and not into life styles.

The Russian Federation, with 3% of the global population, consumes 8% of the natural resources. Two other nations with very large population but low levels of consumption per person, China, with 29%, and India, with 23% of the population of the world, consume 13% and 7% of the resources respectively. These four countries are called “Heavy Weights” when it comes to ecological footprints (consumption rate times population), and together they use more than 50% of the global natural resources per year.

There are ecological footprints calculated for 52 nations, accounting for almost all of the consumption of natural resources of the planet. Of these, only sixteen are consuming within the natural bio-capacity of their allotted land and sea resources. Only Indonesia, Columbia and Peru, among the sixteen, are consuming resources within the bio-capacity of the earth (2.0 hectares per capita) as well as their national share of resources. The rest have
been blest with excess natural resources, which they fail to share. The poorest country is Bangladesh, with only 0.3 hectares per person available. Its ecological footprint is only 0.5 per person, but this modest level of consumption exceeds its national bio-capacity.

Of the 52 countries studied, only ten were consuming on a level mindful of the regenerative capacity of nature. Most nations exceed both their national and global fair share.

The global ecological consumption for the 6 billion citizens of the planet was 2.8 hectares per capita in 1997, that is 40% above the biosphere’s ability to replace the resources. Certainly it is obvious that if we continue to deplete the earth at a non-replaceable rate, future populations, our children and their children, will not have the resources needed to support life. Our war-making today is wasting these resources and causing the future generations to either go without life support, or become involved in endless resource wars. The scarcity of water is already with us, and water resources form one of the thorniest problems in the Israeli-Palestinian crisis.

By this time it should be obvious that old methods of war fighting and preserving national security are now grossly counter-productive. In fact the course we are now on is both suicidal and genocidal. It is not only self destructive and causing insecurity, but it is exacerbating the global depletion of natural resources in an unsustainable way.

How can we begin to undo this self-destructive habit, of violent behavior in response to conflict, to which we seem addicted? How can we stop the escalation of violence which is threatening our very existence, our civilization, and the air, water, land and biological resources which supports our life? It will take a radical intentional change to core human values of trust, reverence for life, respect and compassion.

How to Eliminate the Habit of Warfare:
The first step is be thoroughly sickened by war. Alcoholics would call this “bottoming-out”. We need to admit that we are addicted and capable of destroying this fragile fruitful planet and our centuries of culture, literature, art and civilization. This admission leaves us ready to learn a new pattern of reaction to conflict. There are very many groups who are ready and able to teach conflict resolution techniques to anyone open to learn. I would mention in particular, the International Peace Bureau, the International Fellowship of Reconciliation, Women’s International League for Peace and Freedom (WILPF), Transcend, and El Taller. Peace-making will take a major behavioral change in society, and will require the attention and participation of everyone who is capable of learning.

Civil governments and Religious Leaders are wrong to use persuasion, untruth and propaganda to incite their followers to wage war. The claims of a Divine mandate and of just war intentions, has worn thin! The Just War Theory, devised in the Middle Ages, was designed to assure long-term benefits to both parties after the war was over. For example, by fighting cleanly, both sides could be sure that the war did not escalate, thus reducing the probability of creating an incessant war of counter-revenges. The purpose of 21st century war is to wipe out or so defeat the enemy that he will surrender unconditionally. We can argue that the moral thinking of the Middle Ages is unable to elucidate the problems of war in the 21st century, especially biological, chemical, nuclear and stratospheric war. We can also see with our own eyes that the “incessant war of counter revenge” is now taking place in Iraq, Palestine, and elsewhere, under the guise of just wars.

The threat of war and annihilation is so close that it will be difficult to convince people to abandon their fears and strip themselves of the latest efficient killing machines available. Therefore, disarmament must be universal and occur everywhere simultaneously. How can we possibly accomplish this?

**Starving the Beast:**
Wars require cooperation of civil society. Weapons must be fabricated, involving mining and milling, transportation, research and design, physical plants and support structures. It also requires the cooperation of Universities and Trade Unions, governments and media. One of the saddest parts of the story of war is the recruiting of the brightest young University graduates, and the co-opting of their brains to devise more and more effective mass killing instruments. We need this mental resource in the community!

All of this cooperation with war-making could be withdrawn by a society determined to change the course of violence. Cutting weapon production would also affect the need for weapon designs, and global trade in weapons. In the U.S., the military uses war to showcase its new weapons, and then after selling them widely, the military goes to Congress for more money to devise defenses against those very weapons. This is a death cycle and should be stopped. Both elimination of the international weapon trade, and unfunding weapon research, are necessary for breaking the violent patterns of reaction.

The practice of requiring two years of service from youth before they begin to rear a family and begin a career, has seemed to provide both a maturing process for youth, an ethic of service, and needed, largely unfunded, work for society. I would suggest that youth be trained in non-violent responses to conflict, international policing, emergency response, and service to the United Nations and its various agencies. This training ought to be under United Nations auspices. Protection is needed so that this recruitment can never be converted to war-making. Youth service should be universal for the physically and mentally able.

Currently, the War against Terror, engages non-national forces, and these are most difficult to reach through traditional national methods. Reform of the United Nations, to include a People’s Assembly would go a long way toward allowing the voices of dissent to be heard. Some people feel just as oppressed by the promise of a democratic state, as
others do by a religious theocracy. Any form of government truly chosen by the people and cooperative with the global assembly should be allowed.

Reverence for life and joy in diversity:

I consider killing of the unborn, abandoning of children to the streets and sending our young to be killed in war as symptoms of our dysfunctional society. We need compassion, not legal sanctions against these symptoms. Societies inhospitable to children and which condone forcible pregnancy commit acts of violence. Criminalizing women is not the answer. Women’s rights over their reproductive organs must be respected, and they must be accepted and helped in bearing and raising of children, not sent to jail, condemned to poverty and disgrace. Societies which educate and respect women, and provide social nets, find that they have no problem with overpopulation or unwanted children.

Old men have been sending young men (and women) to war for too long. Rejecting one’s young is a clear sign of a dysfunctional society. Instead of investing in war-making, investing in social nets would go a long way toward reducing violence. Providing jobs for our youth is to help them to find a place in society and fill them with hope in the future.

Nature seems to love diversity. The vast variety of flowers, grasses, trees, animals, fish and birds add to the pleasure of being human. Can we not find the same pleasure in difference in culture, skin color, language, foods, dances and music, which add color to our existence? Creating monocultures, with concessions in every corner of the world, and eliminating every custom different from ours is the sign of great lack of self-confidence. Do we require the whole world to be like ourselves, so that we can feel secure. Breaking our addiction to violence will open us to the beauty and diversity of those with whom we share this earth. It can be a good and pleasant experience.
Actually, if we allowed people some of the mobility of jobs and money in the global economy, people would find places to live where they found comfort and security. It would not be necessary to convert everyone to serve one’s vision of home.

**Taking a Step Towards Freeing Oneself from the Addiction to Violence:**

It is characteristic of addicted people to feel that it is impossible to break the habit. Those who do manage to break it find a delicious freedom, and a new life. What we need is not a Utopia, but just a normal healthy life, based on inner security and not weapons. Wisdom will be valued more than strength, compassion more than cleverness, reverence for life more than ability to kill efficiently. The rising up of the people of the world against the Iraq War gives me hope that there is sufficient strength in our culture to walk the long road of freeing ourselves of addiction. Experience has shown that we cannot do this alone, but need to help one another. Many of our habitual reactions are thoughtless and too quick. We need friends to tell us that we are falling back into the habit of violence. It can be done, and what a wonderful world we will be creating!

Rosalie Bertell, Ph.D., G.N.S.H.
Presented at the Barcelona Forum 2004
**TOWARD A WORLD WITHOUT VIOLENCE**
24 June 2004