



Medical Peace Work Online Course 3

War, weapons and
conflict strategies



MEDICAL PEACE WORK



Education and Culture

Leonardo da Vinci



Course 3: War, weapons and conflict strategies

Objectives

- Describes the health effects of war, weapons and strategies of violent conflict.
- Give an historical and practical analysis of the response of health professional groups to war and militarisation.



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War, weapons and conflict strategies



Chapter 1: Weapons of mass destruction

Chapter 2: Health effects of other weapons and conflict strategies

Chapter 3: Health professions' responses to war and weapons

Characteristics of nuclear weapons

- Purpose: to threaten to kill massive numbers of people in order to prevent attack (deterrence)
- Much greater destructive power than conventional weapons
- Explosion created by splitting atoms and chain reaction, releasing massive amounts of radiation



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Nuclear weapons – effects on health and environment

Flash → retinal injury, blindness

Fireball → Heat wave → vaporizes everything
within certain distance → third-degree burns

Blast → destroys buildings → mechanical injuries,
lacerations, ruptures organs, eardrums

Firestorms → hurricane-like winds, infernos →
people are incinerated → climate change

Fallout → acute radiation sickness → cancer,
genetic damage, weakening

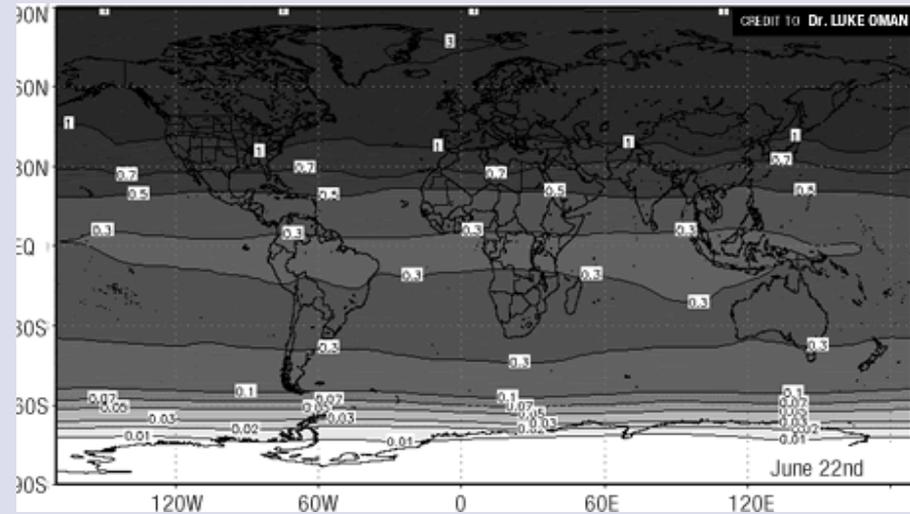
Nuclear weapons - use scenarios and effects

1. Accidental nuclear war
2. Large-scale nuclear attack
3. 'Limited' nuclear exchange
4. Attack on hardened, underground target
5. 'Unauthorised' use



Nuclear weapons - other medical, environmental and social effects

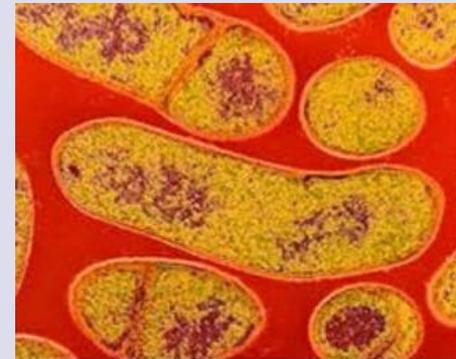
- Climate change
- Nuclear tests
- Production of nuclear weapons
- Nuclear fuel cycle
- Costs of maintaining arsenals



Biological weapons

Characteristics

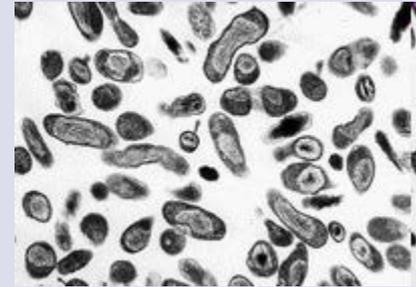
- Uses living (micro) organisms to cause disease or death in large numbers of people, plants or animals
- Organisms should multiply in target
- Infection should take hold and infect others
- Also toxins made by organisms or plants
- Can be lethal or ,non-lethal'
- Best known examples:
anthrax bacteria and small-pox virus



Clostridium botulinum

Biological weapons - health effects

- **Anthrax:** bacterial agent, not contagious, lethal if inhaled
- **Smallpox:** highly contagious viral agent, very high death rate, travels easily through air
- **Plague:** highly contagious bacterial agent, incubation period of 1-5 days, causes potentially lethal pneumonia
- **Ebola:** fever caused by viral agent, no cure or treatment, extremely lethal, leads to bleeding from all orifices
- **Botulinum:** toxin, causes lethal muscular paralysis



Biological weapons - legal status

- Outlawed by treaty: Biological and Toxins Weapons Convention (BTWC)
- all development or production of biological weapons outlawed
- Problems: advances in bioscience, and lack of a verification system

Chemical weapons

- **Nerve agent:** highly lethal, kills in very small dosages (e.g. sarin, soman, VX)
- **Blistering agent:** causes burns and blisters on the body, damages eyes; If inhaled severely damages lungs, often leading to death (e.g. mustard sulphurous gas, lewisite)
- **Asphyxiating agent:** causes damage to lungs (e.g. phosgene, mustard gas)
- **Psychotomimetic agent:** causes a hallucinatory effect similar to LSD (e.g. BZ)
- **Incapacitating agent:** relies on irritants and toxic effects to incapacitate a person temporarily (e.g. tear gas, CS gas)



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Chemical weapons - control regime

- Chemical Weapons Convention (CWC) came into effect in 1997
- 188 parties to treaty, but Egypt, Israel, North Korea and Syria not yet signed
- Problems:
 - pace of destruction of stockpiles
 - verification not taken seriously
 - no challenge inspections
- Definitions of banned weapons problematic, many not prohibited



Radiological weapons

- **Radiological dispersal weapons:** „Dirty Bombs“ disperse radioactivity by detonating explosives surrounded by nuclear material.
- **Nuclear facilities:** Nuclear reactors, nuclear transports and waste storage can be turned into weapons through deliberate attack.
- **Uranium weapons:** containing depleted uranium for use against tanks



Radiological weapons

- measures to deal with threat

- Best measure is prevention, i.e. guard against theft
- Transfer and export control regime: multilateral Convention on the Physical Protection of Nuclear Material (1980)
- IAEA Code of Conduct on the Safety and Security of Radioactive Sources
- Protect nuclear reactors against sabotage including attack with planes
- Ban uranium weapons



War, weapons and conflict strategies

Chapter 1: Weapons of mass destruction



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Landmines and cluster munitions

- 90% of landmine victims are civilians
- destroy infrastructure, make fields useless, and prevent refugee return
- cause disability, demoralization, unemployment, social stigmatization and economic hardship for families and communities
- women victims suffer more, higher death rate
- disproportionate number of victims are children



'Non-lethal' weapons (NLWs)

- designed to incapacitate people or disable equipment, minimal collateral damage
- intended to be discriminate and not cause unnecessary suffering
- effect on people should be temporary and reversible
- should provide alternatives to/ raise the threshold for use of lethal force
- actual use of NLWs shows that none of the above are guaranteed, having exactly the opposite effect to that intended



Rape as a military strategy

Sexualized violence: „a sexual expression of aggression“

- includes rape, sexual degradation, humiliation and violence to breasts and genitals, forced prostitution and trafficking
- abuses used in war to attack the body in order to break the spirit, gender-specific
- Trauma: attack on victim's innermost self and personality, often lead to PTBS, psychosomatic disorders, phobias, suicide
- Physical consequences: injury, pregnancy, infection, HIV, hormonal dysfunction



Public health effects of war

Public Health: concerned with the health of the community as a whole

- immediate effects of violent conflict are increase in death and injury
- fires in refugee or displaced persons camps
- epidemics and communicable diseases
- displacement, disruption and debilitation
- lack of food security and malnutrition
- mental health problems
- lack of drugs for treatment of disease



Small arms and light weapons (SALW)

- SALW include handguns, assault rifles, machine guns, grenades and landmines
- cause the majority of deaths in violent conflict globally
- 639 million small arms globally, or approximately one for every ten people on earth
- direct death toll due to SALW range from 80 000 to 500 000 per year, most in developing world
- 3-4 times this number of people are injured

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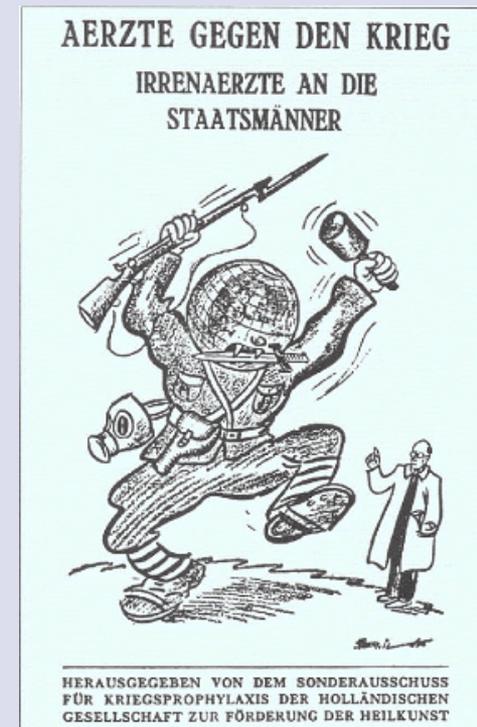
Educating the public

- Know your target audience
- Know yourself
- What is the message?
- Who is delivering the message?
- What methods can be used?



History of health professional activism for peace

- First tried to „humanize“ war
- 1905: International Medical Association Against War
- 1918: Jeanne van Lanschot-Hubrecht questioned giving medical aid in WW1
- 1930: Committee for War Prevention in Holland
- 1936: Medical Peace Campaign in UK
- 1961: Physicians for Social Responsibility (PSR) in USA
- 1980: International Physicians for the Prevention of Nuclear War (IPPNW)



Data-to-policy work

- Evidence for advocacy need credibility (actual and perceived)
- Reliable data has to be collected using recognised methods
- Less influence on policy if disputable
- Less credibility if party has strong interest in a certain result
- Lack of transparency damages findings
- Predicting future using past data for advocacy

Alliances with larger movements

Examples:

- International Campaign to Ban Landmines (ICBL)
- International Action Network on Small Arms (IANSA)
- The Red Cross
- International Campaign to Abolish Nuclear weapons (ICAN)

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