



Public Health Perspectives on Conflict

APHA Session 4043.0

**Conflict and Public Health: A Framework
for Conceptualizing Their Interconnections**

November 6, 2007

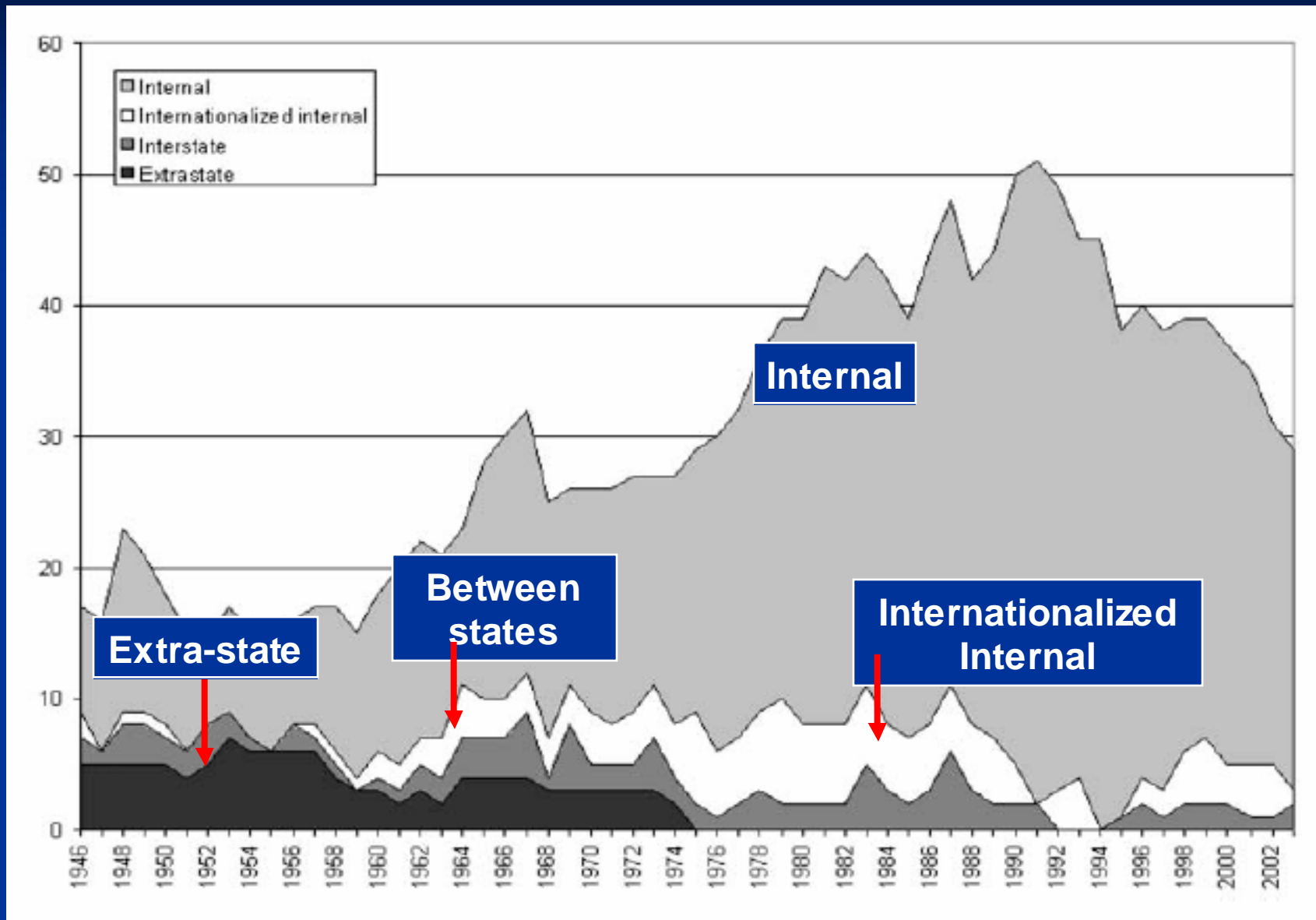
Courtland Robinson

Johns Hopkins Bloomberg School of Public Health

Three Questions

- How does conflict affect health?
- How does health affect conflict?
- How can treating conflict as a public health problem aid in understanding, even preventing of conflict?

Armed Conflict 1946-2003



Ten Most Deadly Conflicts in the 1990s

Table 1 Ten most deadly conflicts originating in the 1990s, range of values for deaths from major published sources

Conflict	Years	Estimated No of deaths (range)
1 Rwanda	1994	500 000-1 000 000
2 Angola	1992-4	100 000-500 000
3 Somalia	1991-9	48 000-300 000
4 Bosnia	1992-5	35 000-250 000
5 Liberia	1991-6	25 000-200 000
6 Burundi	1993	30 000-200 000
7 Chechnya	1994-6	30 000-90 000
8 Tajikistan	1992-9	20 000-120 000
9 Algeria	1992-9	30 000-100 000
10 Gulf war	1990-1	4 300-100 000

(Source: Murray, et al, BMJ, 2002)

Ten Most Deadly Conflicts in the 1990s

- 5 of 6 most deadly are in Africa
- 7 of 10 lasted for 3 years or more
- Ranges are wide
- Countries with more conflict are less likely to have working civil registration systems that record conflict-related deaths

Age and Sex Distribution of Deaths due to Conflicts, 2000

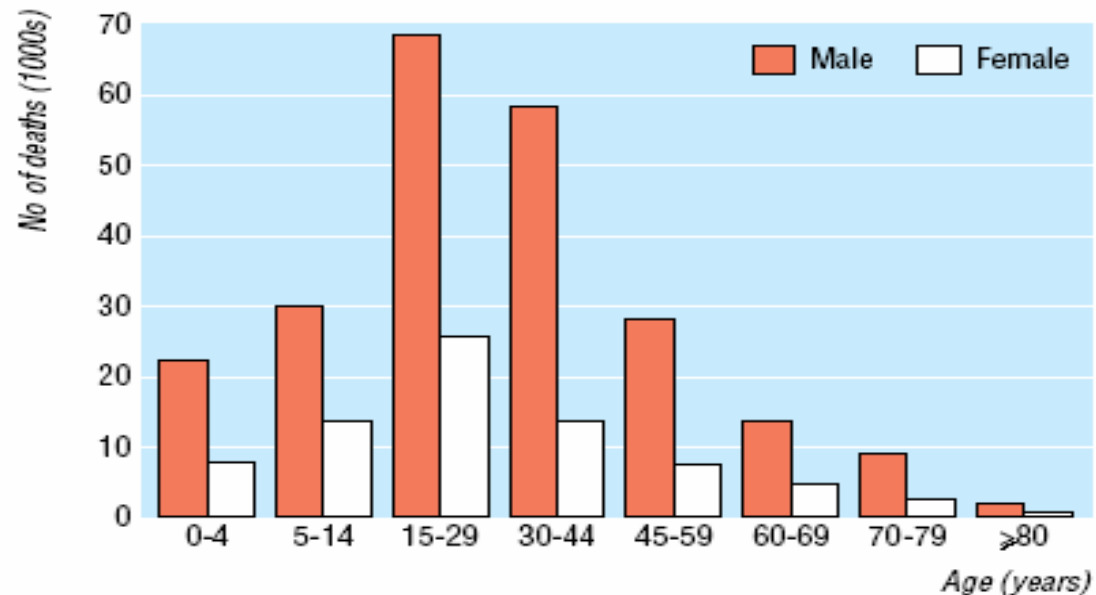


Fig 3 Estimated age and sex distribution of deaths due to conflicts in the year 2000

(Source: Murray, et al, BMJ, 2002)

Age and Sex Distribution of Deaths due to Conflict

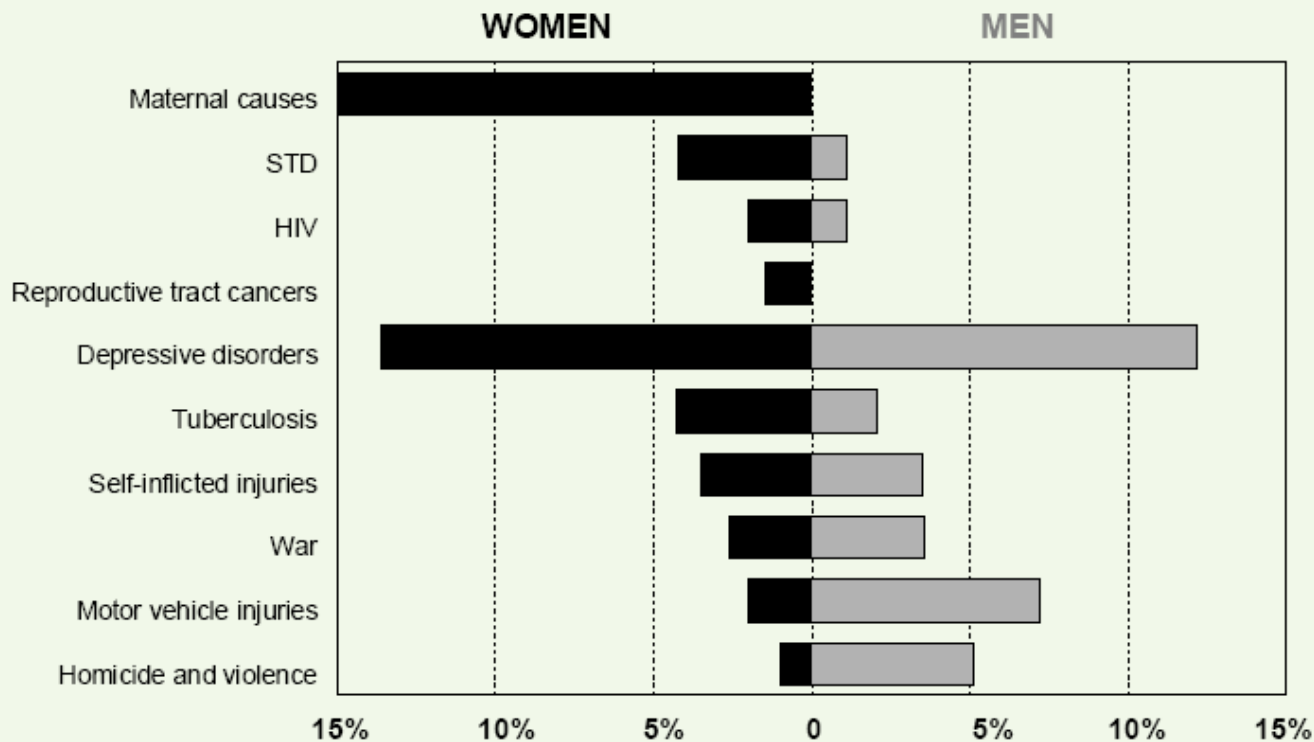
- Conflict-related deaths look like an inverted J-curve of normal mortality.
- Highest-risk groups are males of fighting age but males of all ages seem at higher risk than females.
- Direct mortality effects (battle deaths) vs. indirect mortality effects (the number of deaths following a conflict minus the number of deaths that would have occurred in the same period had the war not occurred)
- Most direct victims of conflict are male while most indirect victims are female. (Plümper and Neumayer, 2006)

Other Burdens of Conflict

- The reported ratio of people injured to killed in modern conflicts ranges from 1.9 to 13.0 (Coupland, et. al., 1999).
- The 1990 *Global Burden of Disease* study estimated that non-fatal outcomes of war resulted in 4.8 million disability adjusted life years (DALYs) worldwide (about the same as fires and around half that caused by road traffic injuries).

Burden of Disease: Women and Men

Figure 2: Burden of disease



Source: The Global Burden of Disease, WHO, 1996

Displacement Effects

- Refugees
- Internally displaced persons (IDPs)
- Irregular migration: trafficking, human smuggling
- Displaced persons often experience higher mortality after displacement: diarrhoeal disease (including cholera and dysentery), measles, acute respiratory infection, and malaria, often exacerbated by malnutrition.
- Food insecurity, crowding, inadequate shelter, poor access to water/sanitation and stress increase susceptibility to disease

Impact of Health on Conflict

- The spread of emerging and re-emerging infectious disease is seen as a threat to international security: SARS, avian flu, etc.
- High mortality from infectious diseases affects the labor force (including the military and may lead to more conscription of child soldiers).
- Higher health costs may lead to declines in other social programs

Can Good Health Reduce Conflict?

- “Health as a Bridge for Peace” used by PAHO in the 1980s, later by WHO (1998).
- Prolonged life and good health is valued by virtually all cultures and countries.
- Restoring health promotes restoration of livelihoods, educational and social services.
- The medical profession is commonly considered impartial with an ethical imperative to first, do no harm; beyond that, to heal.

Conflict as a Public Health Problem

- Measuring the health consequences of conflict may provide an evidence base on which to undertake risk assessments.
- Accurate assessments of the risk of conflict would improve the prospects of limiting or preventing the health consequences of conflict.

Conflict as a Public Health Problem

- “A collaboration between political scientists and public health researchers could provide a firmer basis for attempts to prevent conflicts.”
- “More reliable data are needed to quantify the health effects of armed conflict. Better forecasts of war are also needed to enable public health workers to prepare for refugee problems and the numerous other public health consequences and to inform public policy” (Murray et al, 2002).

Where Do We Go From Here?

- Better measurement
 - Case definitions of conflict
 - Indicators
 - Gender studies, economic studies, inter-disciplinary
- More collaboration
 - Case studies
 - Longitudinal studies
 - Curriculum development, teaching, training
- More effective communication, advocacy



Can we innoculate
populations against
conflict?