The Economic Dimensions of Interpersonal Violence

Hugh Waters – April 28, 2011
The economic dimensions of interpersonal violence
The economic dimensions of interpersonal violence

Introduction
Review of:

• The economic effects of *interpersonal violence* in a wide variety of socio-economic and cultural settings.

• The economic effects of *interventions* intended to reduce interpersonal violence.

• The effects of *economic conditions and policies* on interpersonal violence – with particular reference to poverty, structural adjustment, income equality, and social investment.
Definition

- **Interpersonal violence** includes violence between family members and intimates, and violence between acquaintances and strangers that is not intended to further the aims of any formally defined group or cause.

- Self-directed violence, war, state-sponsored violence, and other collective violence are specifically excluded from this definition.
Methodology

• 248 studies reviewed; 119 studies retained.
• 54 peer-reviewed; 65 are not peer-reviewed.
• Breakdown:
  ✓ 79 on the economic effects of interpersonal violence.
  ✓ 27 on the economic effects of interventions to reduce interpersonal violence.
  ✓ 13 on the effects of economic conditions and policies on interpersonal violence.
Methodology (cont.)

- Studies estimating indirect costs provide much higher cost estimates than studies that do not.

- Large variance for:
  - Economic values assigned to human life.
  - Lost productive time.
  - Psychological distress.
  - Time frame used to calculate costs.
  - Discount rate for future costs and benefits.
A Framework for the Economics of Interpersonal Violence
### Background Risk Factors

- Economic inequality
- Poverty
- Weak economic safety nets
- Unemployment
- Mental illness
- Childhood abuse
- Exposure to violence
- Race
- Age
- Gender
Background Risk Factors
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Interpersonal Violence
- Child abuse and neglect
- Intimate partner violence
- Abuse of the elderly
- Sexual violence
- Youth violence
- Workplace violence

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Interpersonal Violence

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Direct Costs and Benefits:
- Costs of legal services
- Direct medical costs
- Economic benefits to perpetrators
- Direct perpetrator control costs
- Costs of policing
- Costs of incarceration
- Costs of foster care
- Private security contracts costs

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Direct Costs and Benefits:
- Costs of legal services
- Direct medical costs
- Economic benefits to perpetrators
- Direct perpetrator control costs
- Costs of policing
- Costs of incarceration
- Costs of foster care
- Private security contracts costs

Indirect Costs and Benefits:
- Lost earnings and lost time
- Lost investments in human capital
- Indirect protection costs
- Life insurance costs
- Benefits to law enforcement
- Productivity
- Domestic investment
- External investment and tourism
- Psychological costs
- Other non-monetary costs
Results – Selected Studies
Overall Costs of Interpersonal Violence

- The total lifetime cost of injuries due to *interpersonal violence* in 2000 was $37 billion – $4 billion medical costs and $33 billion lost productivity (Corso *et al* 2007).
  - Equivalent to 0.3% of GDP.
- Annual cost to victims of *personal crime* in the U.S. is $507 billion (Miller *et al* 1996).
  - 6.5% of GDP.

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Overall Costs (cont.)

- In England and Wales, total costs from crime of $63.8 billion – 63% attributable to violence (Brand and Price 2000).

- In Australia, annual costs of assault equal $159 per capita without indirect costs (Australian Institute of Criminology 2001).
# The Costs of Social Violence in Latin America

(including collective violence)

<table>
<thead>
<tr>
<th>Country</th>
<th>% 1997 GDP lost due to social violence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>10.5%</td>
</tr>
<tr>
<td>Colombia</td>
<td>24.7%</td>
</tr>
<tr>
<td>El Salvador</td>
<td>24.9%</td>
</tr>
<tr>
<td>Mexico</td>
<td>12.3%</td>
</tr>
<tr>
<td>Peru</td>
<td>5.1%</td>
</tr>
<tr>
<td>Venezuela</td>
<td>11.8%</td>
</tr>
</tbody>
</table>

## Child Abuse and Neglect – Peer-Reviewed

<table>
<thead>
<tr>
<th>Study</th>
<th>Study Location and Population</th>
<th>Cost Categories Included <em>(indirect costs in italics)</em></th>
<th>Total Annual Costs (2001 U.S. $)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Irazuzta et al. (1997)</td>
<td>U.S. – West Virginia, 1991-94. 13 pediatric ICU admissions.</td>
<td>Direct medical.</td>
<td>$0.6 million; $42,518 per child</td>
</tr>
<tr>
<td>Plotnick and Deppman (1999)</td>
<td>U.S. – Various settings, 1990.</td>
<td>Legal services, Medical costs, Policing, Incarceration, <em>Lost earnings and opportunity cost of lost time, Other monetary costs, Psychological costs.</em></td>
<td>$12,028 = cost of hospitalizing an abused child for one week</td>
</tr>
</tbody>
</table>
## Child Abuse and Neglect – Not Peer-Reviewed

<table>
<thead>
<tr>
<th>Study</th>
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<th>Cost Categories Included (indirect costs in italics)</th>
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<tbody>
<tr>
<td>Caldwell (1992)</td>
<td>U.S. -- Michigan. Cases recorded by Department of Social Services</td>
<td>Direct medical, Incarceration, Policing (Protective Services), Lost earnings and opportunity cost, Lost investments in human capital, Psychological costs, Other non-monetary costs.</td>
<td>$1.0 billion</td>
</tr>
<tr>
<td>Fromm (2001)</td>
<td>U.S. -- aggregated studies.</td>
<td>Legal services, Direct medical, Policing, Incarceration, Workers’ productivity, Psychological costs, Other non-monetary costs.</td>
<td>$94 billion</td>
</tr>
</tbody>
</table>

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### Intimate Partner Violence – Peer-Reviewed

<table>
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<tr>
<th>Study</th>
<th>Study Location and Population</th>
<th>Cost Categories Included (indirect costs in italics)</th>
<th>Total Annual Costs (2001 U.S. $)</th>
</tr>
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<tbody>
<tr>
<td>Wisner et al. (1999)</td>
<td>U.S. -- Minnesota, 1992-94. 126 women in a large health plan.</td>
<td>Direct medical costs.</td>
<td>$4,341 per patient</td>
</tr>
</tbody>
</table>
## Intimate Partner Violence – Not Peer-Reviewed

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<tr>
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<th>Total Annual Costs (2001 U.S. $)</th>
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<tbody>
<tr>
<td>CDC (2003)</td>
<td>U.S. -- 1995 National Violence Against Women Survey; FBI data.</td>
<td>Direct medical services, mental health services, <em>lost productivity</em>.</td>
<td>$5.8 billion - productivity is 15.6% of this.</td>
</tr>
<tr>
<td>Day (1995)</td>
<td>Canada, data drawn from surveys.</td>
<td>Direct medical costs (dental costs also), <em>Lost earnings and opportunity cost of time, Other monetary costs, Psychological costs.</em></td>
<td>$1.2 billion.</td>
</tr>
<tr>
<td>Morrison and Biehl (1999)</td>
<td>Stratified random samples -- 310 women in Santiago, Chile, and 378 women in Managua,</td>
<td><em>Lost earnings and opportunity cost of time.</em></td>
<td>$1.73 billion in Chile; $32.7 million in Nicaragua</td>
</tr>
<tr>
<td>Snively (1994)</td>
<td>New Zealand</td>
<td>Direct medical costs, welfare, legal, policing.</td>
<td>$717,000 for New Zealand</td>
</tr>
<tr>
<td>Women’s Advocates Inc. (2002)</td>
<td>United States -- overall.</td>
<td>Costs of legal services, direct medical, policing, incarceration, other monetary costs (shelters), <em>Lost earnings and opportunity cost of time, Workers’ productivity.</em></td>
<td>$12.6 billion</td>
</tr>
</tbody>
</table>
### Sexual Assault – Peer Reviewed

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<tr>
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</tr>
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<tbody>
<tr>
<td>Cohen (1988)</td>
<td>U.S. -- pain and suffering data from more than 100,000 jury decisions</td>
<td>Direct medical costs, Lost earnings and opportunity costs of time, Psychological costs, Other non-monetary costs.</td>
<td>Cost of rape -- $14.9 billion.</td>
</tr>
</tbody>
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# Workplace Violence

<table>
<thead>
<tr>
<th>Study</th>
<th>Peer-Reviewed (Y/N)</th>
<th>Study Location and Population</th>
<th>Cost Categories Included (indirect costs in italics)</th>
<th>Total Annual Costs (2001 U.S. $)</th>
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### Youth Violence – Peer Reviewed

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<tr>
<th>Study</th>
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<th>Cost Categories Included (indirect costs in italics)</th>
<th>Total Annual Costs (2001 U.S. $)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cohen (1998b)</td>
<td>U.S. -- youth criminals (data from other studies)</td>
<td>Costs of incarceration, Direct medical costs, <em>Lost earnings and opportunity costs of time, Employment and workers’ productivity, Psychological costs.</em></td>
<td>Cost per youth resorting to life of crime -- $1.9 to $2.6 million.</td>
</tr>
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</table>
Facilitators of Interpersonal Violence
Background Risk Factors
- Economic inequality
- Poverty
- Weak economic safety nets
- Unemployment
- Mental illness
- Childhood abuse
- Exposure to violence
- Race
- Age
- Gender

Facilitators (Proximate Risk Factors)
- Firearms
- Alcohol and drugs
- Gangs

Interpersonal Violence
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Guns

• More than 30,000 people die annually from firearms injuries in the U.S. – the second leading cause of death for individuals aged 15 to 34.

• The annual costs of firearm injuries in the U.S. estimated to be $27.3 billion (Max and Rice 1993).

• After including psychological costs and the value of quality of life – this estimate is $155 billion, or 2.3 percent of GDP (Miller and Cohen 1997).
Alcohol and Drugs

• The costs of violent crime committed under the influence of alcohol equaled $33.3 million in 1995 – 8.3% of the cost of all violent crime.

• Drug-related crime costs $60 to $100 billion annually in the U.S. (including productivity costs). Violent crime accounts for 10% of this figure (National Crime Prevention Council 1999).

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The Economic Effects of Interventions to Reduce Interpersonal Violence
Background Risk Factors

- Economic inequality
- Poverty
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Facilitators (Proximate Risk Factors)

- Firearms
- Alcohol and drugs
- Gangs

Interventions

- Firearms control
- Substance abuse prevention and treatment
Background Risk Factors
- Economic inequality
- Poverty
- Weak economic safety nets
- Unemployment
- Mental illness
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- Exposure to violence
- Race
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Interventions
- Education
- Deterrence
- Incarceration

Facilitators (Proximate Risk Factors)
- Firearms
- Alcohol and drugs
- Gangs

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Interventions
- Firearms control
- Substance abuse prevention and treatment
Evidence of Effective Interventions

• The 1994 Violence Against Women Act in the U.S. has resulted in a net benefit of $16.4 billion, of which $14.8 billion is averted victim’s costs.

• Providing shelters for victims of domestic violence would result in a benefit to cost ratio of 6.8 to 18.4.
Evidence of Effective Interventions (cont.)

- A gun registration law in Canada cost $70 million, in comparison with a total annual cost of $5.6 billion for firearm-related injuries.

- Interventions that target juvenile offenders result in economic benefits that are more than 30 times greater than the corresponding costs.
Conclusions
Conclusions

- Violence is expensive. Estimates of the cost of violence in the United States reach 3.3% GDP.

- The cost of all types of violence in selected Latin American countries ranges from 5.1% of GDP in Peru to 24.9% in El Salvador.

- In England and Wales, the total costs from violence – including homicide, wounding, and sexual assault – amount to $40.2 billion annually.

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Conclusions (cont.)

- Violence disproportionately affects low and middle-income countries.

- The World Report on Violence and Health estimates that 90%+ of all violence-related deaths occur in these countries.

  ✓ The estimated rate of violent death in low and middle-income countries is 32.1 per 100,000 people in 2000 – compared to 14.4 per 100,000 in high-income countries.
Conclusions (cont.)

• Violence disproportionately affects low and middle-income countries.

• Economic losses related to productivity are undervalued in lower-income countries.

✓ For example, homicides cost $15,319 in South Africa, $602,000 in Australia, $829,000 in New Zealand, and $2+ million in the U.S.
Conclusions (cont.)

• The public sector – and thus society in general – picks up much of the tab.

• In the U.S., from 56% to 80% of the costs of care of gun and stabbing injuries are either directly paid by public financing or are absorbed by government and society in the form of uncompensated care.