Beginning to understand the economic costs of children's exposure to intimate partner violence

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Intimate partner violence (IPV)

- 37% of violent crime in Canada
- Many costs: medical, counseling, police and criminal justice, productivity, quality of life
- 2009 estimated costs in Canada: $7.4 billion
  - 80% of those costs borne by the victim

But what about the children?

- A lot of research on child maltreatment, and its costs on society
- Elevated risk factors for those children exposed to IPV
- No research on estimating the costs of exposure to IPV

Effects of IPV exposure

- Neurological disorders
- Physical, mental, and substance abuse disorders
- Delinquency, crime, academic, and employment outcomes
- The list goes on…

What do we need to know?

- In order to make an estimate of the cost, we need:
  - Base rates of these outcomes
  - Increased risk factor for children exposed to IPV
  - The costs associated with the outcomes

What is available?

- Sleep disturbances, asthma, frequent headaches, smoking, alcohol abuse, driving under the influence, illicit substance abuse, early pregnancy, unintended pregnancy, attempted suicide, conduct disorder, referral to a speech pathologist, and below or at poverty.

Is this good enough?

- Missing information for many outcomes
  - School outcomes, conduct behaviors, costs of crime
- These will be indirectly included in one (or more) of the 13 outcomes we have data for: e.g., substance abuse and poverty
- Our estimates should then be considered conservative

Impact of Exposure to IPV

Table 1. Summary of outcomes for children exposed to IPV in cost calculations

IPV Outcome	Base Rate	IPV Factor	Economic Cost per person per year, 2013 CDN$
Sleep disturbance	0.30	1.2	9,490
Asthma	0.07	1.15	3,995
Frequent headaches	0.15	1.3	410
Smoking	0.20	1.3	6,500
Alcohol use	0.085	1.7	5,951
DUI	0.20	1.3	2,315
Illicit substance abuse	0.014	1.7	22,886
Early pregnancy	0.04	2.0	2,205
Unintended pregnancy	0.5	1.5	1,998
Attempted suicide	0.04	1.8	17,373
Conduct disorder	0.03	2.5	19,115
Speech pathologist	0.022	7.5	19,115
Child poverty	0.22	2.0	8,108

How many new IPV exposures are there each year?

- Need to consider the following:
  - Under-reporting in police data
  - Children are not always present
  - If present, they may not be aware
  - High degree of repeat victimization in the data
  - Not all the outcomes are applicable to all children

Estimate #1

- Used police data and considered
  - Repeat victimization and under-reporting
  - Population 15 years or older
  - Percentage of households with children and the average number of children
  - Percentage of "aware" children

- 124 666 new children exposed each year

Estimate #2

- 3% of women victims of IPV each year
  - Victimization survey (Johnson, 1996)
- Female population, 15 years and older
- Repeat victimization
- Percentage of households with children and the average number of children
- Percentage of "aware" children

- 130 713new children exposed each year

Estimate #3

- Number of children exposed to IPV in 1993
  - Johnson (1996), based on number of women
- Increased population of women over past 20 years
- Repeat victimization

- 124 883 new children exposed each year

Consistent results

- Three different methods
  - Two based on same data from Johnson (1996), but different
- Yielded very similar estimates
- 125 000 is used in all calculations

Cost calculations

- Very simple model:
  - Estimate number of ***additional*** outcomes emerge because of exposure to IPV
  - Multiply by costs obtained in the medical and public health literature
- Considered different ages for different outcomes: e.g., pregnancies beginning at 15; smoking, alcohol use, drug use, suicide beginning at 12, and so on

Impact of Exposure to IPV

Table 2. Percentages of age ranges and females, percent

Females, 15 to 17	8.8
All, 12 to 17	34.5
All, 11 to 17	39.8
All, 10 to 17	45.1
All, 9 to 17	50.4
All, 8 to 17	55.7
All, 7 to 17	61.1
All, 6 to 17	66.6
All, 5 to 17	72.3
All, 4 to 17	77.9
All, 3 to 17	83.5

Economic costs of children's exposure to IPV

- Yearly economic cost for one cohort of children: $830 million
- Discounted at 2%, over 10 years this becomes: $7.6 billion
- This does not include growth in population

Economic costs, cont'd

- Further restricting the ages, the economic costs can be $496 or $746 million
- $4.5 and $6.8 billion over 10 years, respectively

Economic costs, cont'd

- But each year there is a new cohort of children exposed to IPV
- Considering this (while accounting for fewer years of exposure for subsequent children)
- 10-year cost of $28.2 billion
- This number only grows if one considers the full 17 years of childhood

Summary

- Not considering the economic costs borne by children exposed to IPV under-estimates the societal impact of IPV
- Most individuals spend most of their life beyond the age of 17
  - $830 million per year figure is realistic
- Considering outcomes not included and even a small percentage of intergenerational transmission of IPV (inconclusive evidence, to date)
  - Economic costs could exceed $1 billion per year