Costs and impacts of gender-based violence: Methodologies and new estimates

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Women assault victims missed an average of 7.2 days of work in U.S.

Infant and child mortality is more than six times greater in Nicaragua if a mother is exposed to physical and sexual violence.

The Colombian government spends U.S. $73.7 million per year to prevent, detect, and treat intimate partner violence.

Domestic violence against women in Chile produces wage losses of 2% of GDP.
Goals of paper

- Examine methodologies used to produce cost and impact estimates of GBV
- Produce new impact estimates for a set of countries using a standard methodology
A peek at the key findings...

- Estimates of *socio-economic costs* of GBV are useful to dimension the issue; some econometric issues remain unresolved.

- Estimates of the *impact* of GBV are useful in formulating prevention responses; simultaneity issues remain.
Methodologies for estimating costs and impacts of GBV

Costing approaches

- “Accounting” estimates of direct costs
- Indirect cost estimates
  - Parametric estimates for Chile and Nicaragua
  - Non-parametric estimates for Colombia
Steps in an accounting approach (CDC, 2003)

- Determine usage of medical and mental health services by women as a result of intimate partner violence (sample survey of women)
- Establish the unit cost of services used (survey of women or establishments)
- Calculate total costs by multiplying unit costs by number of times services were used

→ U.S. $839 per IPV rape (CDC, 2003)
→ U.S. $817 per IPV physical assault (CDC, 2003)
Disadvantages of direct cost estimates

- Social norms inhibit demand for services
- Willingness to pay not reflected in the allocation of public budgets
- Severely underestimates the social cost of gender-based violence
- Particularly poor measure for developing countries
Parametric estimates of indirect costs of GBV

Example: Morrison and Orlando (1997) estimate earnings equation using IV for GBV.

Findings: GBV leads to a reduction in earnings of up to 46% for victimized women in Chile and Nicaragua

Disadvantages:
- Partial measure
- Hard to know if they underestimate or overestimate the cost of GBV
Non-parametric estimates of costs of GBV

Example:  Sanchez (2004) estimates the wage impacts of intimate partner violence in Colombia.

Findings: Significantly lower earnings and lower rates of labor force participation

Disadvantages:
- Partial measure
- Does not account for potential simultaneity between earnings and violence
Methodological options to produce impact estimates

- DALYs
- Naïve comparison of means
- Propensity score matching—new cross-country estimates of impacts of GBV
Impact estimates

- DALYs
- Naïve comparison of means
- Propensity score matching—new cross-country estimates of impacts of GBV
Propensity score matching results for Haiti, Peru and Zambia

- Use DHS data

- Logistic regressions for specific types of violence:
  - Lifetime physical violence
  - Current physical violence by intimate
  - Lifetime sexual violence by partner
  - Current sexual violence
  - Lifetime physical violence by relatives

- Use predicted values to form control group
Impact of Lifetime Physical Violence by Partner on Women Victims


- Reproductive health: higher prevalence of STDs and genital sores
- Use of health services intensifies
- Higher probability of paid work
Impact of Lifetime Physical Violence by Partner on Children of Women Victims


- Young children’s health: higher prevalence of diarrhea and anemia
- Children in school have higher educational attainment
- Inter-generational transmission of violence
Impact of Lifetime Sexual Violence by Partner

Results for Haiti (2000)

- Women’s reproductive health: higher rates of terminated pregnancies, STDs, genital sores or ulcers
- Women’s use of health services intensifies
- No impact on children’s health
- No impact on children’s educational attainment
Conclusions

- Proliferation of cost/impact estimates
- Direct cost estimates particularly unhelpful, especially in developing countries
- Indirect cost estimates can be useful for dimensioning the issue
- Impact estimates also useful: DALYs and PSM most promising
- No one “perfect” methodology