The Burden and Economic Costs of Violence Against children

Xiangming Fang, PhD

Shanghai
November 22, 2016
Minimum Numbers of Children < 18 Years Experiencing Past-Year Sexual, Severe Physical, or Emotional Violence, 2014

> 1 Billion Children

North America 40,200,000
Europe 15,200,000
Asia 714,600,000
Africa 229,800,000
Latin America & the Caribbean 58,400,000
Oceania 640,000

VAC, SDGs & Economic Development

Health
SDG 3

Violence against Children
SDG Targets 5.2 &16.2

Human Capital
Most SDGs

Education
SDG 4

Economic Growth
& Development
SDGs 1,8,10

Promoting health, promoting sustainable development:
it’s our health, our future and our choice.
Significance of Quantifying VAC Costs

• High prevalence and negative consequences mean costs may be substantial

• Important to:
  – Increase awareness of current severity of VAC
  – Compare VAC with other public health concerns
  – Inform economic evaluation of VAC interventions

• Economic burden estimates take 1 of 2 perspectives
  – prevalence-based or incidence-based
Economic burden of child maltreatment in the United States

- Objective
  - Estimate average lifetime cost per CM victim and aggregate lifetime costs for all new cases of CM incurred in 2008 using an incidence-based approach
Incidence Rate & Cost Categories

• 772,000 children were CM victims
  – 75% had no history of prior victimization

• Focus on:
  – Short-term health care costs
  – Long-term health care costs
  – Productivity loss
  – Child welfare costs
  – Criminal justice costs
  – Special education costs
Lifetime Costs of Nonfatal CM

• Average lifetime cost per victim of nonfatal child maltreatment $210,012 in 2010 dollars
  – $32,648 in childhood health care costs
  – $10,530 in adult medical costs
  – $144,360 in productivity losses
  – $7,728 in child welfare costs
  – $6,747 in criminal justice costs
  – $7,999 in special education costs

• Total lifetime cost approximately $124 billion, about 1% of the national GDP
Comparison with Other Health Problems

- Lifetime cost per victim of non-fatal CM is comparable to or higher than many other high profile public health problems
  - $210,012 per CM victim
  - The discounted lifetime costs of stroke per person: $159,846
  - The total lifetime costs associated with type 2 diabetes: $181,000 - $253,000 per case
Economic burden of child maltreatment in China

- Estimate minimum costs of child maltreatment in China (prevalence–based):
  - 1: Estimate PAFs for specific outcomes and effects linked to child maltreatment by type of maltreatment (physical abuse, sexual abuse, emotional abuse, and neglect)
  - 2: Develop a regional costing model to estimate minimum costs of child maltreatment in China based on the PAFs calculated during step one
Methodology: Estimate PAFs

- PAFs estimated separately for physical abuse, sexual abuse, emotional abuse, and neglect

- Within these, PAFs calculated for: mental disorder, smoking, problem drinking, illicit drug use, and self-harm
Methodology: Regional Costing Model

- Two steps used to estimate the economic costs of child maltreatment
  - 1: PAFs multiplied by an appropriate measure of disability-adjusted life-years (DALYs) for mental health outcomes or health risk behaviours to estimate DALYs loss
  - 2: DALY loss converted into monetary value by assuming that one DALY is equal to the country’s per-capita GDP
Findings

• 27.6 million of the DALYs lost in China in 2010 were attributable to child maltreatment
  – Corresponding estimates for diabetes mellitus – 7.8 million DALYs
  – Ischaemic heart disease – 17.8 million DALYs

• Estimated economic value of DALYs lost to child maltreatment in China in 2010 totaled US $122 billion, accounting for 2.06% of China’s GDP in 2010
Other CM Burden Estimates

• Estimated economic value of DALYs lost to CM in the UNICEF East Asia Pacific region totaled US $194 billion, accounting for 1.88% of the region’s GDP

• Economic burden of violence against children in Cambodia totaled US$168 million in 2013, accounting for 1.10% of the country’s GDP

• Peru, South Africa
VAC & Economic Development

• South Africa
  – Physical violence and emotional violence reduce victim monthly earnings by 11.7% and 9.2%
  – ZAR25.2 (0.63% of GDP) and ZAR9.6 billion (0.24% of GDP)

• United States
  – CM reduces victim annual earnings by 27%
  – $83.6 billion (0.7% of GDP)
Conclusion

• Economic estimates of its consequences confirm the importance of prioritizing child maltreatment as a key global health concern

• Underscoring the need to steer resources towards prevention and to strengthening the knowledge base regarding the scale and consequences of child maltreatment at a global level