# VIOLENCE UNWRAPPED

Save the Children

The Social and Economic Burden of **Violence Against Children in South Africa**  **Physical violence:** Physical violence against children is that which results in actual or potential physical harm from an interaction or lack of an interaction, which is reasonably within the control of a parent or person in a position of responsibility, power or trust. There may be single or repeated incidents.

**Sexual violence:** Sexual violence against children is the involvement of a child in sexual activity that he or she does not fully comprehend, is unable to give informed consent to, or for which the child is not developmentally prepared and cannot give consent, or that violate the laws or social taboos of society. Sexual violence against children is evidenced by this activity between a child and an adult or another child who by age or development is in a relationship of responsibility, trust or power, the activity being intended to gratify or satisfy the needs of the other person.

Emotional violence: Emotional violence against children involves the failure to provide a developmentally appropriate, supportive environment, including the availability of a primary attachment figure, so that the child can develop a stable and full range of emotional and social competencies commensurate with her or his personal potentials and in the context of the society in which the child dwells. There may also be acts toward the child that cause or have a high probability of causing harm to the child's health or physical, mental, spiritual, moral or social development. To be framed as abusive, these acts must be reasonably within the control of the parent or person in a relationship of responsibility, trust or power. Acts include restriction of movement, patterns of belittling, denigrating, scapegoating, threatening, scaring, discriminating, ridiculing or other non-physical forms of hostile or rejecting treatment.

**Neglect:** Neglect can be defined as the failure to provide for the development of the child in all spheres: health, education, emotional development, nutrition, shelter, and safe living conditions, in the context of resources reasonably available to the family or caretakers and causes or has a high probability of causing harm to the child's health or physical, mental, spiritual, moral or social development. This includes the failure to properly supervise and protect children from harm as much as is feasible.

## EXECUTIVE SUMMARY

Violence against children exists in every country in the world, cutting across culture, class, education, income and ethnic origin. South Africa is no exception.Violence against children can have lifelong adverse health, social and economic consequences for survivors, including behavioural problems and risky sexual behaviours; mental and physical health conditions; increased risk of delinquency, criminal and violent behaviours; disability from physical injury; reduced health-related quality of life; lower levels of educational achievement and impaired capacity of adults to generate income.

Given the high prevalence and the many negative short- and long-term consequences, the economic cost of violence against children is substantial. Estimating the economic burden of violence against children is important for several reasons, including: increasing awareness on the current severity of violence against children, assisting policy makers and government officials in prioritizing funding and developing preventative services, placing the problem in the context of other public health concerns, and providing data for economic evaluations of interventions to reduce or prevent violence against children. Estimates of the economic burden have been published for a few countries such as the United States, Australia, and China, but are lacking in most countries of the world, including South Africa.

Information on the cost of violence against children in South Africa will be crucial to further develop the child protection system in terms of the design, the enforcement and the effective allocation of budget for the operation of the system. Thus additional evidence and information on the economic burden of violence against children in South Africa and its budget implications are needed for planning, coordination and investing in violence prevention.

Save the Children South Africa aims to advocate for an effective child protection system that prevents and responds to violence against children. To make this happen, the government needs data and evidence to understand the consequences of violence against children both to the individual victims and their families, and to the society as a whole. In this way, violence against children can be understood as the public policy issue that it is, having implications for social and economic costs if not addressed. The purpose of this study was to estimate the economic burden of violence against children in South Africa. We assembled summative estimates of lifetime prevalence, calculated the magnitude of associations with negative outcomes, and thereby estimated the economic burden of violence against children. The data generated in this study is intended to advance the awareness of policy makers of the economic impact of violence against children and therefore support budget allocations and investments in this regard.

#### Summary of methods and data

Three steps were used to estimate the economic burden of violence against children in South Africa:

## Step one - Systematic review of prevalence and consequences

A systematic review was conducted to identify studies reporting on the prevalence and consequences of violence against children in South Africa using the Africa-Wide Information, MEDLINE, PsycINFO, CInaHL, ERIC, SocINDEX and Embase databases. Given that there were too few studies to yield reliable estimates on the consequences of witnessing parental violence and exploitation, these forms of violence against children were not included in this study. This study only focuses on four major types of violence against children: physical violence, sexual violence, emotional violence, and neglect. Key child protection researchers and organizations in South Africa were also contacted to identify additional studies. The reference lists of key narrative reviews on violence against children in South Africa and the region were also scanned for additional studies, and a manual search of eight international and national journals was also conducted.

The systematic review identified a total of 65 studies. For consequences, a total of 24 studies met the inclusion criteria: 10 measured the relationship between violence against children and interpersonal violence, 4 measured anxiety, 3 measured self-harm, 3 measured alcohol abuse, 3 measured depression, 3 measured sexually transmitted diseases, 2 measured drug abuse, 1 measured HIV, and 5 measured other types of outcomes such as unwanted pregnancy or high school drop-out.

Following a systematic review of the prevalence literature, we began a meta-analysis to determine the prevalence rates. However, at the same time, the results from the Optimus Study South Africa (Artz et al., 2016) were released (see http://www.cjcp.org.za/ uploads/2/7/8/4/27845461/08\_cjcp\_report\_2016\_d. pdf) – these provide the first nationally representative figures of violence against children in South Africa. Since nationally representative studies provide more accurate data than those that can be pieced together through a meta-analysis, the Optimus Study data were used in subsequent analyses.



### Step two - Calculation of population attributable fractions (PAFs)

Population Attributable Fractions (PAFs) are used to estimate the proportion of morbidity or mortality attributable to a risk factor. All PAF formulas require: (1) Relative risk (RR) of a disease or outcome (e.g., depression) given exposure to a risk factor (violence against children), or an odds ratio (OR) which can be converted into an approximate estimate of the relative risk (RR); and (2) a measure of prevalence. In order to match the outcomes with the available Global Burden of Disease categories, the outcomes were limited to: alcohol abuse, drug abuse, sexually transmitted diseases (STDs), HIV, interpersonal violence, self-harm and mental disorder - including depression and anxiety. For each of these outcomes, we calculated a population attributable fraction for each form of violence against children for which we had data.

In addition to the data obtained from a systematic review of the outcomes literature, outcomes data from the Cape Area Panel Study (CAPS) were analysed to determine PAFs. The CAPS is a longitudinal study of a large representative sample of adolescents in Cape Town as they undergo the multiple transitions from adolescence to adulthood – it began in 2002 and ended in 2009.

PAFs for each selected outcome were estimated separately for each of four major types of violence against children (physical abuse, sexual abuse, emotional abuse, and neglect).

Step three - Estimating economic burden Based on the available data, a prevalence-based approach was used to estimate the economic burden of violence against children in South Africa in 2015. The cost categories included: (1) the monetary value of disabilityadjusted life years (DALYs) lost from fatal cases of violence against children, and physical and mental health outcomes and health risk behaviours attributable to nonfatal violence against children; (2) reduced earnings due to physical violence against children and emotional violence against children; and (3) child welfare costs.

I. We estimated the disability-adjusted life-years (DALYs) lost – due to violence against childrenattributable mental health disorders and health-risk behaviours – and then estimated the monetary value of those DALYs in 2015 South African Rand (ZAR). For each of the main types of violence against children that we considered, a population attributable fraction for an outcome of interest was multiplied by the estimate of the number of the DALYs expected to be lost because of that outcome.

Second, the DALYs lost from fatal cases of violence against children were calculated as the number of child deaths multiplied by a loss function specifying the years lost for deaths as a function of the age at which death occurs (WHO, 2013).

DALY losses were converted into monetary value by assuming that one DALY is equal to the country's per-capita GDP.

- 2. Using secondary analysis of the CAPS, we first estimated the percentage reduction in adulthood earnings attributable to physical violence against children and emotional violence against children. Next, we estimated the number of people among the population of labour force who are lifetime physical and emotional violence victims, respectively. Finally, we combined the two pieces of data to estimate the total productivity loss in South Africa in 2015 attributable to physical and emotional violence against children.
- 3. To determine child welfare costs we totalled the Department of Social Development's provincial revised estimates for the Child Care and Protection sub-programme to get a national figure.

#### Summary of results

From the Optimus Study South Africa we were able to obtain nationally representative prevalence data on violence against children in South Africa. The prevalence rates we used are as follows: 7.2% for contact sexual violence (6.1% for males and 8.5% for females), 26.1% for physical violence (24.0% for males and 28.7% for females), 12.6% for emotional violence (9.7% for males and 16.2% for females), and 12.2% (9.8% for males and 15.1% for females) for neglect.

Differences exist in the links between violence against children and health consequences and their associated economic burden.



## Monetary value of DALYs lost from nonfatal violence against children

#### Physical violence against children

An estimated 1 420 744 of the DALYs lost in South Africa in 2015 were attributable to physical violence against children. The estimated economic value of these lost DALYs was ZAR103.8 billion – or 2.6% of South Africa's gross domestic product (GDP) in 2015 (in 2015, GDP was estimated at R4 trillion – Statistics South Africa, 2016).

#### Sexual violence against children

 An estimated 390 905 of the DALYs lost in South Africa in 2015 were attributable to sexual violence against children. The estimated economic value of these lost DALYs was ZAR28.6 billion – or 0.7% of GDP in 2015.

#### Emotional violence against children

 An estimated 786 560of the DALYs lost in South Africa in 2015 were attributable to emotional violence against children. The estimated economic value of these lost DALYs was ZAR57.5 billion – or 1,4% of GDP in 2015.

#### Childhood neglect

 An estimated 85 764 of the DALYs lost in South Africa in 2015 were attributable to childhood neglect against children. The estimated economic value of these lost DALYs was ZAR6.3 billion – or 0.16% of 2015 GDP.

Adding up the economic value of DALY loss across different types of violence against children, 2.7 million DALYs lost in South Africa in 2015 were attributable toviolence against children. The estimated economic value of DALYs lost to violence against children in South Africa in 2015 totalled ZAR196 billion – or 4.9% of South Africa's GDP in 2015.

## Monetary value of DALYs lost from fatal violence against children

The estimated economic value of the lost DALYs attributable to fatal violence against children was ZAR6.2 billion in 2015 – or 0.16% of South Africa's GDP in 2015.

#### **Reduced earnings**

The total monthly productivity loss attributable to physical violence against children and emotional violence against children in South Africa in 2015 were ZAR2,100,262,762 (5,503,055\*382) and ZAR797,270,391 (2,656,647\*300), respectively. Multiplying by 12, the total productivity loss in South Africa for the year of 2015 that was attributable to physical violence against children and emotional violence against children were ZAR25.2 billion (0.63% of GDP) and ZAR9.6 billion (0.24% of GDP), respectively.

#### Child welfare costs

Overall, provinces in South Africa spent ZAR1.58 billion (0.04% of GDP) on child care and protection in fiscal year 2015/2016.

## Total estimated cost of violence against children in South Africa

Summing up all the above cost we arrive at a total estimated cost of physical and emotional violence against children of ZAR238.58 billion – or 6% of South Africa's gross domestic product in 2015.

#### Limitations

As with any research study, there are several limitations:

- In studies on violence against children in South Africa, there is a paucity of representative sampling, a lack of standardised definitions of violence against children, and a variety of measurement scales – this renders comparative analysis difficult.
- PAFs may be sensitive to small changes in the underlying parameters (prevalence and RR), and the implications can be significant when multiplied by an aggregate outcome. Although we carefully reviewed all input data to select appropriate studies, our results rest squarely on the quality of available data.
- While the DALY as a measure has made a central contribution to the assessment of disease burden, there has been some debate about their validity for disability specifically and about their universal application. The DALY results should thus be interpreted with caution.

• Another significant issue is that the studies of violence against children typically excluded many possibly important confounding factors, had small samples, and also rely on self-report. This may ultimately mean that the population attributable fractions are either over- or underestimated.

#### Recommendations

These limitations to the study mean that we have most likely under-estimated the costs of violence against children, but it is clear that these costs are substantial. Preventing violence against children must therefore become an urgent priority, for policy, research and programming.

For policy-makers, there are two priorities:

- I.Investing in prevention. A helpful list of evidencebased strategies for preventing violence of all forms, including violence against children, is provided by the World Health Organization (2009):
- Developing safe, stable and nurturing relationships between children and their parents and caregivers
- b. Developing life skills in children and adolescents.
- c. Reducing the availability and harmful use of alcohol.
- d. Reducing access to guns, knives and pesticides.
- e. Promoting gender equality to prevent violence against women; and
- f. Changing cultural and social norms that support violence.
- g. Victim identification, care and support programmes.
- 2.Secondly, policy-makers should invest in improving the quality of data sources for tracking violence against children, such as the Child Protection Register, in order both to plan services more accurately and to assess whether prevention efforts are effective.

Concomitantly, a key ethical responsibility borne by both those involved in programming and by policymakers is that programmes should have a strong evidence-base before they are rolled out widely: this is an ethical responsibility, as programmes without evidence may achieve nothing, or worse, do harm (Wessels et al., 2013); it is also, for the same reasons, a fiscal responsibility, as whether programmes achieve an effect or not, they are costly.

Priorities for researchers lie in improving the amount and quality of data available. Our work here has been much constrained because of the lack of data on violence against South African children.

#### Conclusion

This is the first study to estimate the aggregate burden of violence against children in South Africa. Violence against children is a common experience for South African children, and causes great losses to South Africa society in terms of both DALYS and finance. According to our calculations, 2.7 million and 84 287 DALYs lost in South Africa in 2015 were attributable to nonfatal and fatal violence against children, respectively. The DALYs lost to nonfatal violence against children is larger than the corresponding estimates for diabetes mellitus – 1.0 million DALYs lost - and stroke - 0.95 million DALYs lost. Comparing this with the DALY figures for HIV/AIDS, non-fatal violence against children led to the loss of 25% of the DALYs lost to HIV/AIDS in 2015 – HIV/ AIDS was the leading cause of DALY loss in 2015. The estimated economic value of DALYs lost to violence against children (including both fatal and nonfatal) in South Africa in 2015 totalled ZAR202 billion. In addition, the reduced earnings attributable to childhood physical violence and emotional violence in South Africa in 2015 were ZAR25.2 billion and ZAR9.6 billion, respectively. In addition, South Africa spent ZAR1.6 billion on child care and protection in fiscal year 2005/2016, many of which costs are directly related to violence against children.

Considering all data limitations together, we suggest that the burden estimates derived from this study under-estimate the true situation. Our estimates of the burdens of violence against children are based on the available data on a small number of health outcomes. Many of the serious effects of violence against

children were not included because no studies exist in South Africa. These effects include: poor educational outcomes; higher levels of healthcare utilization; criminal behaviour; reproductive health problems; and chronic diseases such as diabetes, heart disease and cancer.

This study confirms the importance of prioritizing violence against children as a key social and economic concern for South Africa's future. The economic burden of violence against children in South Africa is substantial. The data generated as part of this analysis will help raise the awareness of policy makers on the lifetime impacts of violence against children, guide budget allocation and investment, and provide data for economic evaluations of interventions to reduce or prevent violence against children. It also underscores the need to steer resources towards prevention and to strengthening the knowledge base regarding the scale and consequences of violence against children at the national level.



