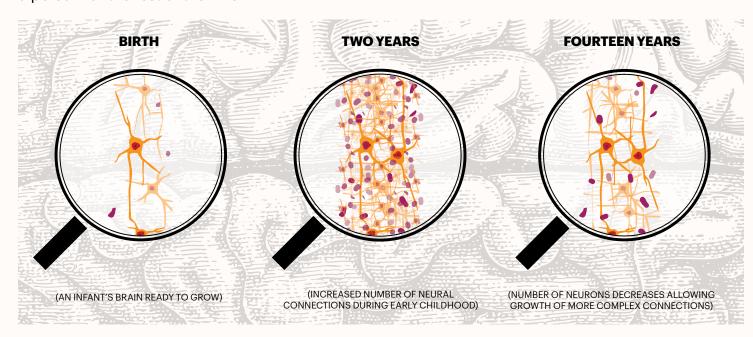
# How violence & neglect leave their mark on a child's brain

1 in 2 children under age 18 – over a billion worldwide – experience violence every year. This happens in every country, in rich and poor households.<sup>1</sup>

Exposure to violence while the brain is still growing leaves physical marks on the brain that can impact a person for the rest of their life.2



The brain is most vulnerable to trauma in the first two years of life - when many new neural paths are growing, and again in the teenage years - when adolescents learn complex analytical skills and mature emotionally.3

### Children who grow up in conditions of deprivation, neglect and other forms of hardship often exhibit elevated stress hormone levels which impact on the growth of the brain.<sup>4</sup>

Adults with a wide range of issues including mental health problems, addiciton, obesity, type II diabetes and coronary heart disease often had poor brain development in early childhood.<sup>5</sup>



#### **Violence** in the Home

1 billion children are subjected to regular physical punishment by their caregivers while 275 million children witness domestic violence every year.6

Child witnesses of domestic

violence can develop PTSD

resulting in permanent

changes to their personality

and their ability to interact

effectively in society.7



#### Violence at School

Slightly more than 1 in 3 students between the ages of 13 and 15 worldwide experience bullying on a regular basis.



### in the Community

One in four school-age children in the U.S., ages 6 to 17, has been directly exposed to violence involving a weapon, either as a witness or a victim.10



150 million girls and 73 million boys experience sexual violence each year.11



1 billion boys and girls are living in conflict-affected areas.13

## Violence & neglect scar the growing brain



Both victims and perpetrators have elevated rates of psychiatric disorders such as agoraphobia. anxiety, panic disorder, depression, and suicidality.9



Such exposure has been found to greatly increase the chance that a child will suffer symptoms of PTSD.10



to a range of mental health and behavioral impacts including PTSD, substance abuse, risky sexual behavior and interpersonal relationship problems.12



Children living through conflict experience both dramatic traumatic events and chronic adversities. The physical effects on their brains impact their memory, problem solving and moral reasoning, emotional and creative expression, and social development.14

# hese scars can be prevented



In Uganda, SASA! was found to reduce domestic violence by up to 52% and significantly changed attitudes to partner violence.15 The Early Enrichment Project in Istanbul reduced the use of physical punishment by

caregivers by 73%.1



Safe School campaign (Jordan) showed an average decline of 28% in physical violence and 15% in verbal violence in schools.17 In Uganda, The Good Schools Toolkit has reduced the use of physical violence by teachers against students by up to 40% by introducing guidelines for teacher-student cooperation.18 The 'For Safe and Enabling School Environment' program in Croatia reduced peer violence, aggression and bullying by 50%.19



The Cure Violence healthmodel employs violence interrupters in 50 cities around the world and has resulted in up to 75% reduction in shootings in program areas in Chicago, and a 50% drop in homicides in Loiza, Puerto Rico.20



Stepping Stones in South Africa produced a long-term trend in the reduction of the use of sexual violence among males and females by promoting mutual cooperation and understanding.21



Committee's Parents Make the Difference program in Liberia reduced physical and verbal punishments by up to 56% by introducing families in adverse post conflict and displacement conditions to new ways of coping with stress and conflict.22

## **Call to Action**

Every girl and boy deserves a chance to grow free from the physical and psychological scars of violence and neglect.

Support programs that reduce violence, poverty, and neglect in early childhood to give children their best chance at life.

- <sup>1</sup> ODI & Childfund Alliance 'The costs and economic impact of violence against children' (2014)
- <sup>2</sup> Mead, Beauchine, Shannon, 'Neurobiological adaptations to violence across development' Development and Psychopathology 22 (2010), 1-22
- <sup>3</sup> Swart, Chisholm, Brown, Neuroscience for Leadership: Harnessing the Brain Gain Advantage, Palgrave Macmillan,
- 2015

  4 National Scientific Council on the Developing Child. (2005/2014). Excessive Stress Disrupts the Architecture of the Developing Brain: Working Paper 3. Updated Edition. <sup>5</sup> Felitti VJ. Anda RF. Nordenberg D. Williamson DF. Spitz
- AM. Edwards V. Koss MP. Marks JS. Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: the Adverse Childhood
- Experiences (ACE) study. American Journal of Preventive Medicine 1998;14(4): 245-258. <sup>6</sup>UNICEF, Hidden in Plain Sight: A Statistical Analysis of Violence Against Children (2014) 7 Areti Tsavoussis, Stanislaw P. A. Stawicki , Nicoleta Stoicea

andThomas J. Papadimos 'Child-witnessed domestic

a call for societal self-examination and awareness

violence and its adverse effects on brain development:

- Frontiers in Public Health 1 October 2014 doi: 10.3389/ fpubh.2014.00178
- <sup>8</sup> UNICEF, Ending Violence Against Children: Six Strategies for Action (2014) Copeland, Wolke, Angold & Costello, 'Adult Psychiatric
- Outcomes of Bullying and Being Bullied by Peers in Childhood and Adolescence' JAMA Psychiatry.
- 2013;70(4):419-426. doi:10.1001/jamapsychiatry.2013.504. 
  <sup>10</sup> Mitchell et al, Weapon Involvement in the Victimization of Children, Pediatrics doi: 10.1542/peds.2014-3966
- <sup>11</sup> Plan, Learn Without Fear: The global campaign to end violence in schools. Woking: Plan International
- Headquarters. (2008) <sup>12</sup> Walsh, Galea & Koenen, Mechanism Underlying Sexual Violence Exposure and Psychosocial Sequulae: A Theoretical and Empirical Review, Clinical Psychology Science and Practice, Vol 19 issue 3, October 2012 <sup>13</sup> European Commission, Children in Emergencies Factsheet, July 2015

<sup>14</sup> Qouta, Penamaki & El Sarraj, Child development and

Palestinian Experience, International Journal of Behavioral

family mental health in war and military violence: The

development, 2008, 32 (4), 310-321

- <sup>15</sup> Ellsberg, Mary, Diana J. Arango, Matthew Morton, Floriza Gennari, Sveinung Kiplesund, Manuel Contreras, and
- UNICEF, Ending Violence Against Children: Six Strategies
- Charlotte Watts. "Prevention of violence against women and girls: what does the evidence say?." The Lancet (2014).

  16 UNICEF, Ending Violence Against Children: Six Strategies for Action (2014).
- for Action (2014)

  18 Devries et al, The Good School Toolkit for reducing
- physical violence from school staff to primary school
- students: a cluster-randomized controlled trial in Uganda, Lancet Global Health, 2015: 385: e378-86 <sup>19</sup> UNICEF, Ending Violence Against Children: Six Strategies for Action (2014)
- Lure violence, Results Recent Successes http://cureviolence.org/results/recent-successes/ (accessed April 2015)

  UNICEF, Ending Violence Against Children: Six Strategies for Action (2014)
- 22 International Rescue Committee, Parents Make the Difference (2014)

Oure Violence, Results - Recent Successes