

# The impacts of armed conflict on child health

Ayesha Kadir

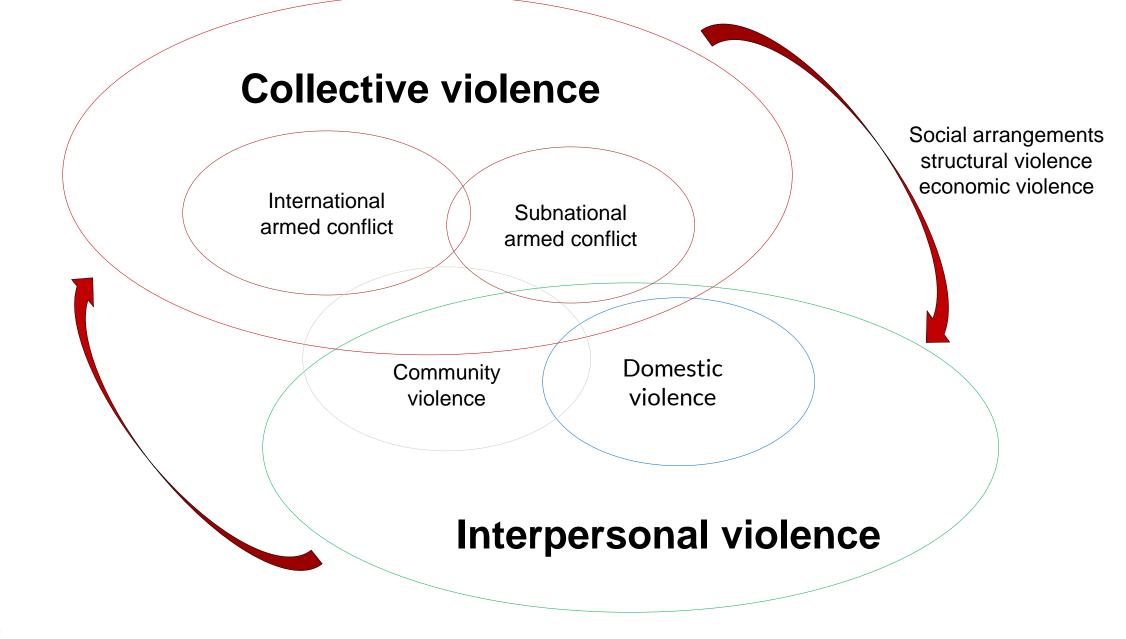


### Faculty Disclosure

Х	No, nothing to disclose
	Yes, please specify:







Save the Children

# Overview

- 1.65 billion children (67% of all children) were living in conflict-affected countries
- Over 449 million children (>1 in 6) are living within 50 km of an active conflict zone (PRIO 2022)
- Fewer conflicts in recent years, but bloodier
- Increasing protracted conflicts



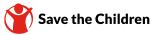
• Disparities between regions and even within countries

#### Forced Displacement

- 89.3 million forcibly displaced people in 2021
- Children account for 41% of forcibly displaced people, 30% of global population
- 400,000 documented unaccompanied or separated children applied for asylum between 2010– 2019 - significant underestimate, missing data from numerous countries and variable reporting methods



*Source*: Østby, Gudrun; Siri Aas Rustad & Andrew Arasmith (2022) Children Affected by Armed Conflict, 1990–2021, Conflict Trends, 2. Oslo: PRIO.



### Data

- Mostly descriptive studies from a single point in time
  - chart reviews, single-facility studies, surveys, and increasingly studies using DHS and other survey data mapped to areas that experienced conflict at the time of the survey
- Basic mortality figures difficult to confirm based on estimates, often using multiple sources, limited or no age disaggregation





# Direct effects of armed conflict on children

- Experience of violence
  - physical, sexual, and psychological
- Injuries
- Illness
- Disability
- Sexual violence and exploitation
- Torture
- Execution
- Association with armed forces or armed groups
- Psychological trauma
- Death



10-year-old girl in school in Taiz, Yemen. Her family was displaced from their village due to conflict, then in October 2022 she and her sister stepped on a landmine while collecting firewood. She lost her left eye and her right hand, and both of her legs were injured. *Photo: Al-Baraa Mansoor / Save the Children* 



### Indirect effects of armed conflict on children



16-year-old looking at the refugee camp in the south of Niger where he lives after his parents were killed and he was forced to flee armed conflict in Nigeria. *Photo: Gudmund de Stordeur Baudinet/Save the Children* 

- Illness
- Injuries
- Access to basic needs
- Altered physical, emotional and/or cognitive development
- Displacement
- Separation from family
- Orphaned no estimates available
- Changes in the role of children
- Social marginalization (displaced children, children born of rape, children who have been incarcerated, etc)
- Maltreatment
- Death attributed to indirect effects



### Indirect effects: Access to basic needs





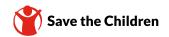


# Indirect effects: Illness

- Context plays an important role
- Communicable and noncommunicable diseases
- Malaria, diarrhea, acute respiratory illnesses, fever are major causes of mortality
- Malnutrition
- Vaccine-preventable diseases
- Birth complications
- Increased prevalence of birth defects
- Increased prevalence of cancer
- Children with illness in conflict settings have higher mortality



8-month-old boy in Yemen with severe acute malnutrition. *Photo: Jonathan Hyams / Save the Children* 



### **Indirect effects: Injuries**

Landmines and UXO

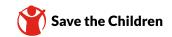
- Children account for half of injuries from UXO in Afghanistan, Nepal, Eritrea, and Iran
- Children more often suffer upper body injuries
- Injuries most often sustained while playing, going to school, or tending animals

Other environmental hazards created by armed conflict

- Collapsing buildings, toxic exposures, etc
- Availability of weapons



Source: War Childhood Museum, Sarajevo



### Indirect effects: Altered physical, emotional and/or cognitive development

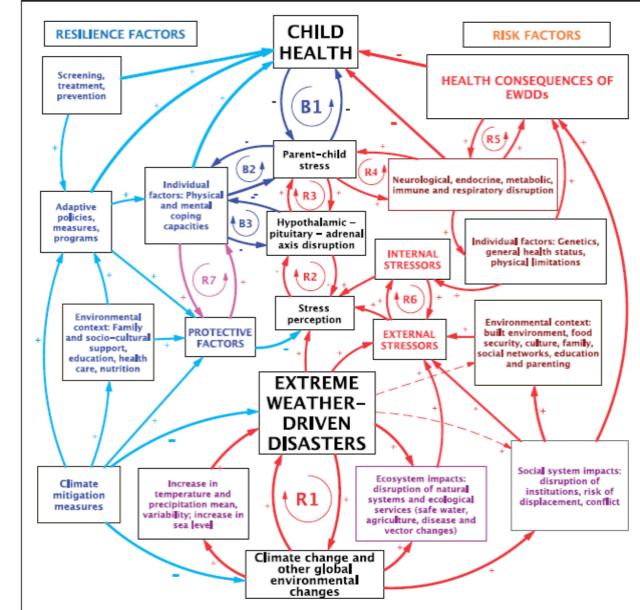
#### Very little data

Helsinki Birth Cohort (Pesonen et al, 2008-2011)

- Altered stress physiology in children separated from parents for a period during WWII
- Age at separation predicted salivary cortisol, plasma cortisol and plasma ACTH
- Earlier onset menarche in separated girls
- Separated boys had lower intelligence scores
  - varied based on length of separation and age at time of separation

Israeli study (Feldman et al, 2013)

- Altered stress physiology in war-exposed cohort of children 1.5-5 years
- Lower baseline cortisol and less reactivity to stress
- Cortisol levels independently related to maternal cortisol and maternal mental health



Source: Martinez Garcia and Sheehan, 2016.





### Indirect effects: Changes in the role of children

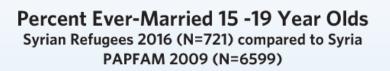
14-year-old girl out of school. Now she bakes bread and tends the family animals. *Photo: Sacha Myers / Save the Children* 

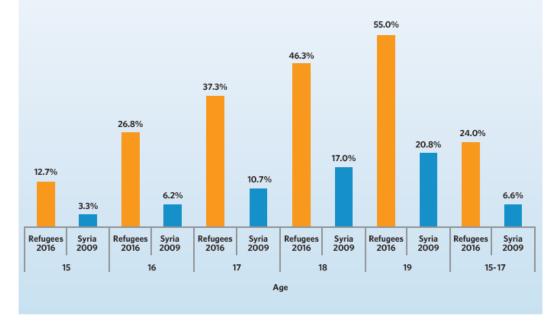
#### Children take on adult responsibilities

Child carers for ill or disabled parents

Child labour

**Changes in sexual behavior** 







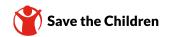


Multiply displaced families, after the Internally Displaced People's (IDP) area in West Darfur where they were living was destroyed between 27th and 28th of April 2023, due to the armed conflict in Sudan. *Photo: Mohamed Khalil/ Save the Children* 

### Indirect effects: Social marginalization

Particularly vulnerable groups:

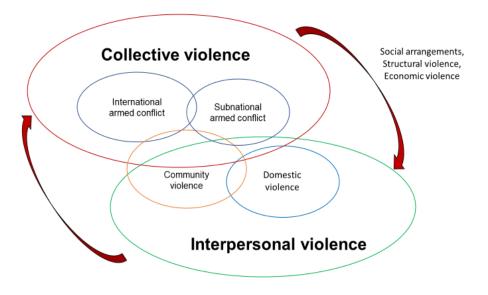
- Displaced children
- Children born of rape
- Children who have been incarcerated
- Children associated with armed forces and armed groups

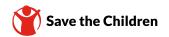




### Indirect effects: Maltreatment

- Caregivers who suffer from stress or have a mental health disorder related to their exposure to armed conflict have higher rates of child-reported and caregiver-reported child abuse
  - (Studies in Timor-l'Este, Uganda, and Lebanon)
- Ugandan study: war exposure and subsequent trauma are mediating factors for violence against children
- Children of U.S. military personnel have documented increased rates of physical abuse and neglect during the deployment and after return
- Children of US military personnel have higher rates of experiencing violence in school and are more likely to carry a weapon.

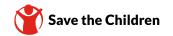






# Mortality ??

- Difficult to assess
- Major causes: LRTI, diarrhea, measles, malaria, and malnutrition
- Reports on trauma mortality range 2.6-18%, and up to 24% in neurosurgical patients
  - No figures on mortality after hospital discharge
- More than 1/3 of studies in a recent systematic review included mortality as a main outcome, but the heterogeneous design preclude pooling the date
  - Pooled study of 37 datasets from 1985–2001:
  - Relative risk of dying during periods of conflict higher for children ≥5 years
  - In some countries, U5 mortality actually decreased during the period of conflict → Suggests that nuanced and context-specific factors lead to conflict-associated mortality during different periods of childhood
- Maternal education may be protective (Iraq and Guinea-Bissau)
- Displacement of children due to war in Angola carried a higher mortality risk than displacement for other reasons
  - Highest risk of death during the first year after migration



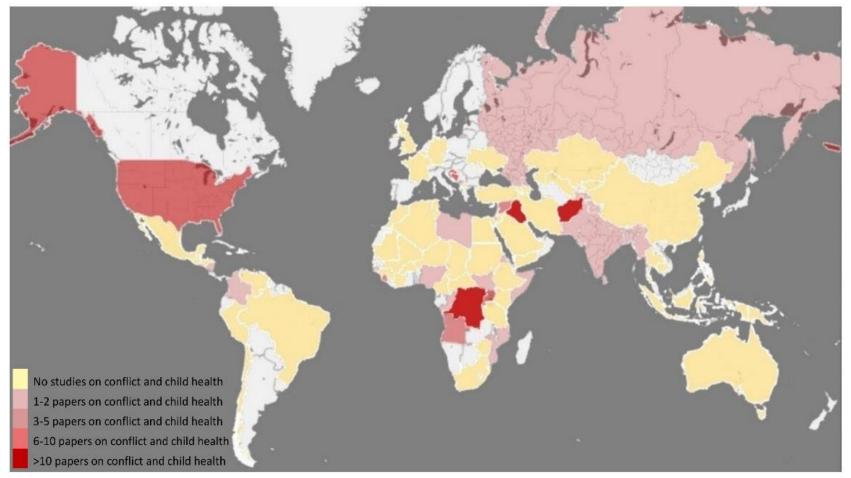
# Inequities in the visibility of children

- What we don't know may be as important or more important than what we do know
- Geography of our knowledge is limited
- Categorizations of effects telescopic view, mainly of small areas over short periods of time
- Limited knowledge about the nuances of how conflict affects children and families
  - Long term physical, psychological and developmental effects
  - Interplay between physical and mental health, disability
  - Effect of environmental damage and pollution
  - Changes in social arrangements
- Importance of context
- Limited understanding of what happens to children or of the effectiveness and saftey of interventions

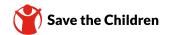




#### Studies on child health in countries with documented armed conflict 1990-2016



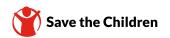
Source: Uppsala Conflict Data Program and the Heidelberg Institute for International Conflict Research. \*This map does not include NATO forces sent from numerous countries to conflicts in other countries. \*\*The colour coding applies to entire countries, and not regions within countries.



### **Reducing inequities in child health**

- Marked disparities in health and social outcomes between children on conflict-affected areas and children in stable, peaceful areas
  - Between countries and between settings within the same country
- Protracted conflict is increasingly common
- Limited understanding of medium and long-term impacts of acute and protracted conflict on children's health, growth and development





### References

Kadir A, Shenoda S, Goldhagen J. Effects of armed conflict on child health and development: A systematic review. PLOS ONE. 2019 Jan 16;14(1):e0210071.

UNHCR. Global Trends: Forced Displacement in 2019, 18 June 2020.

Østby, Gudrun; Siri Aas Rustad & Andrew Arasmith (2022) Children Affected by Armed Conflict, 1990–2021, Conflict Trends, 2. Oslo: PRIO.

Pettersson T, Öberg M. Organized violence, 1989–2019. Journal of Peace Research. 2020. 57(4);597–613.

Martinez Garcia D and Sheehan MC. Extreme Weather-driven Disasters and Children's Health. International Journal of Health Services. 2016; 46(1) 79–105.

Ayesha Kadir | Save the Children | Senior Humanitarian Health Advisor | ayesha.kadir@savethechildren.org



