


# Cascading consequences of armed conflict and famine on child health: a time for peace

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Although armed conflicts originate in the adult world, their effects often are most harmful to the lives of children in 21st century wars.<sup>1</sup> The size, physiology and limited mobility of children leave them more vulnerable than adults to severe and fatal injuries from arms fire, toxins and explosive devices that are the most common causes of paediatric casualties in recent wars. Children are disproportionately injured and killed by unexploded ordnance, often during routine childhood activities of play, exploration or chores.<sup>2</sup> Many young people cease to be treated as children during conflict, with hundreds of thousands of children worldwide occupying combat roles as soldiers or mine sweepers, exploited for sex trafficking, and becoming human shields.<sup>3</sup> The United Nations has recently verified more than 260 000 cases of grave violations against children in more than 30 conflict situations across the globe over the past 16 years.<sup>4</sup> While some injuries are able to be treated, other conditions may take years to address, including post-traumatic stress disorder, depression, anxiety and other behavioural conditions that persist long after cessation of hostilities. Recent reports from Syria, Yemen, Afghanistan, Palestine, and Iraq, and Ukraine have documented takeovers of healthcare facilities by militant groups for use as firing locations or hostage detention spots. This has had a significant impact on access to care. In addition, war disrupts access to routine preventive care. At least 10 000 children have died since the beginning of the conflict in Yemen owing to lack of access to vaccines and routine care.<sup>5</sup>

Developing children are particularly sensitive to disruption of attachment relationships through parental separation or death, along with the loss of social supports through displacement and destruction of community or culture. In addition to directly risking child lives, the urbanisation of modern battlefields

jeopardises children's safe access to schools, gathering places and medical care (both responsive and preventative health services). It is not surprising, given their total dependence on functioning community systems around them, that individuals under age five experience the highest mortality rates from the indirect effects of conflict.<sup>6</sup>

## THE INTERPLAY OF ARMED CONFLICT AND FAMINE ON CHILD HEALTH

Food insecurity, like war, poses both acute and long-term risks to children. Though often discussed as distinct calamities, famine and war often share a set of contributing factors and play a role in one another's onset and intensification. To grasp their interconnection, it is important to appreciate how extensively food availability relies on the stability of multiple social systems. Just as children depend on the adults around them to secure nourishment, those adults in turn depend on wages, shops and community centres, which depend on functioning economies, trade networks, reliable energy, water supplies, and infrastructure for transportation and distribution. Modern famine increasingly is associated with political conflicts and weaponisation of food production.<sup>7</sup> Combatants may burn or co-opt farms, block supply lines, divert irrigation and traffic food meant for humanitarian purposes. As an example, the Russian embargoes of Odesa and other ports prevented the export of 25 million tons of grain amid an ongoing global hunger crisis, with 345 million people worldwide currently facing acute food insecurity and imminent danger of famine.<sup>8</sup> In Somalia alone, where climate change has driven down rainfall, 7.1 million are facing acute food insecurity and 250 million the prospect of famine.<sup>9</sup> Two days after Russia and Ukraine signed an international agreement to reopen Ukrainian grain exports, Odesa



was bombed again. Subsequently, hope was sparked by the first grain shipment out of Ukraine on 1 August 2022, after over 6 months of conflict.

The inter-relatedness of conflict and famine is also clear in Yemen's civil war, which erupted in 2015 between groups supporting President Abdu Rabbu Mansur Hadi's government and those supporting the armed Houthi resistance. The participation of outside international participants with the government supported by Saudi Arabia, USA and the United Arab Emirates, and the Houthis by Iran.<sup>10</sup> This proxy war and protracted military stalemate yielded economic collapse, combined with unemployment and inflation, and amid the economic crisis, combatants destroyed crops. A blockade of the Red Sea prevented humanitarian food aid from reaching the Houthi portion of the country. The famine stemming from Yemen's civil war cost the lives of more than 85 000 children from 2015 to 2018.<sup>11</sup> In 2020, UNICEF described this as 'the largest humanitarian crisis in the world,' with an estimated 12.2 million Yemeni children in need of assistance.<sup>12</sup>

The continuum of a household's food access—from security, to insecurity and then malnutrition—can progress rapidly. At any moment, microgeographical fluctuations in social and political power in a region may 'tip the scales' in a family from food security to insecurity. Children affected by political violence may have a nutritional status that is tenuous at best, and adverse health effects of armed conflict can be exacerbated by malnutrition. Depending on the type of malnutrition, its developmental timing, duration and severity, a child may experience growth stunting, immune and metabolic system dysfunctions, and impaired cognitive development. Severe protein deficiency (kwashiorkor), untreated for long enough, may result in permanent cognitive disabilities and reduced physical health. Similarly, overall caloric deprivation (marasmus) can hamper language and learning capacities.<sup>13</sup> Each of these effects adds to the existing vulnerability of a child in the midst of armed conflict, with the risks of famine and armed conflict cascading into one another.

## CONCLUSION

Humanitarian crises of political violence and famine—with their direct and indirect effects, including economic failure, parental separation, disruption of education, healthcare and community supports, along with the cumulative stress they cause to families—have a devastating impact on the health and development of children. Although additional research is needed on effective ways to protect and promote the health and development of children in the context of humanitarian crises, evidence indicates that recovery for children depends on securing their health and safety, while also restoring the social systems vital to child development. These crucial 'developmental ecologies' can remain effective when parents and communities have

the capacity to provide appropriate care and systems supporting children and their families are functioning well enough to convey safety and stability. Prioritising child resilience amid conflict, disaster and famine means protecting children, while at the same time, preserving and strengthening the essential ecologies that foster healthy development: nutritional infrastructure, medical care, families, effective schools, safe housing and cultural communities.

Despite international human rights, humanitarian and criminal laws and multiple international declarations, conventions, treaties and courts—injury and death of children due to armed conflicts have worsened over the decades.<sup>14</sup> It is critically important that a concerted effort be undertaken through diplomacy and negotiation to address and rectify this issue. Towards this end, paediatric associations across the globe in conjunction with partners should call for the implementation of a UN Humanitarian Response on Child Casualties in Armed Conflict.<sup>15</sup>

Knowing that children disproportionately suffer physical damage during conflict and famine, those intervening in humanitarian crises would be wise to target interventions protecting children and youth. In 1984, during the El Salvador civil war, the World Food Programme implemented a feeding initiative at schools that initially served 200 000 children. As the programme grew over the subsequent decades, management and funding transitioned to the El Salvador government.<sup>16</sup> A more recent child-focused humanitarian effort by the WHO increased support to Yemen designated for child malnutrition.<sup>17</sup> It is essential to anticipate humanitarian crises so that the international community can intervene proactively, with a special eye to children.

Finally, the best way to protect children from the risks of conflict, war and famine is to prioritise children and to invest proactively in peace. This goal should go beyond the prevention of conflict to promote the resilience capacity of individuals, families, communities and societies. One promising prevention effort is UNICEF's Learning for Peace programme, which offers training in mitigating conflict, strengthening social cohesion, and safeguarding children's developmental and cultural needs.<sup>18</sup> Critically, this programme acknowledges resilience as a multi-system phenomenon, training participants to see systems of health, child-rearing and education as fundamental building blocks for peace.

The fragility of our world and its future has grown more obvious each year over the past decade. Intensifying climate crises will test our global capacity to prevent armed conflict and famine as resources grow in scarcity.<sup>19</sup> Although we cannot predict all of the specific challenges that children will face in the coming decades, many of the tools needed to protect and heal them can be nurtured and restored now, making this the most important time for the adult world to invest all that it can in the multi-system resilience of children.<sup>20</sup>

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## Correction: *Cascading consequences of armed conflict and famine on child health: a time for peace*

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This article has been corrected since it was published online. The first sentence of the article has been changed from ‘Although armed conflicts originate in the adult world, their effects often are most harmful to the lives of children, constituting up to 90% of fatalities in 21st century wars.’ to ‘Although armed conflicts originate in the adult world, their effects often are most harmful to the lives of children in 21st century wars.’

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