Comment

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Three siblings from Pattapur in eastern India are among the thousands of children who have lost their parents to COVID-19 in the country.

Use HIV's lessons to help children orphaned by COVID-19

Rachel Kidman

Young people who have lost parents to the pandemic need urgent support and long-term study to avert the cascade of adversity that can follow. Decades of research into the HIV epidemic provide a solid foundation.

I have spent my career studying how the HIV epidemic affects children. One profound way is through the death of one or both parents — the United Nations definition of an orphan. As of 2020, about 15 million children and adolescents, mostly in sub-Saharan Africa, had lost one or both parents to HIV/AIDS. These youngsters face immense challenges. Through decades of research, the field is slowly learning how to help them lead healthy lives and succeed in school.

I never thought that my expertise on pandemics and mass child bereavement would be relevant to the United States. And then the COVID-19 pandemic hit. As I saw the daily death counts grow, I worried about the children being left behind. There were some anecdotal stories published, but no rigorous estimates that captured the true scale of this crisis for children. So, my colleagues and I set out to answer the question: how many young people are losing parents to the pandemic?

It was an ever-increasing target. With every draft of our paper, we had to revise the count. We ran the last model just before publication; our estimate was that, between February 2020 and February 2021, about 40,000 children had been orphaned as a result of the pandemic, just in the United States[1]. To put this another way: for every 13 or so US

COVID-19 deaths, a child loses a parent.

A second research group, led by epidemiologist Susan Hillis at the US Centers for Disease Control and Prevention in Atlanta, Georgia, published its global orphanhood estimates last month[2]. The team focused on 21 countries where the bulk of infections were reported in 2020–21. They estimate that, already, more than one million children globally have lost a parent to COVID-19.

These numbers vastly undercount the current orphan crisis: COVID-19 deaths in 2021 have already surpassed those in 2020 and are still growing. These children need urgent support and long-term study.

Childhood adversity

From my own work and that of many others globally, we know that children who lose a parent can experience a cascade of negative consequences[3]. In one study, for example, we found that children in sub-Saharan Africa who lost both parents were 50% more likely to experience sexual abuse than were non-orphaned children[4]. Many children develop depression, anxiety and post-traumatic stress disorder in the wake of a parent's death[5]. If unaddressed, these disorders can persist for years, and might worsen as orphaned adolescents reach young adulthood[6]. Orphans are also more likely to drop out of school and to become stuck in a cycle of poverty[7]. One study found that their risk of suicide was twice that of peers who hadn't experienced a parent's death; the risk remained elevated for 25 years following such a death[8].

The death of a parent can be understood in the larger framework of adverse childhood experiences. There is a rich and compelling literature demonstrating the ways that distressing and traumatic events are embodied through chronic stress responses. These affect biological, behavioural and social processes throughout a person's life[9].

It is a sad fact that millions of children have experienced adversity in the context of the COVID-19 pandemic, and will continue to do so. We are seeing a rise in child abuse, family violence and food insecurity, to give just a few examples[10].

The death of a parent is distinct, however, both in its severity and because it often increases the frequency of other adversities. The cumulative burden matters: there is a clear link between the number of adverse childhood experiences and the likelihood of negative outcomes[9,11].

Support children

The good news is that most children are resilient. With the right combination of services and resources, orphaned children can be healthy, happy and do well in school. Researchers can critically appraise the evidence from both high- and low-resource contexts, including those most affected by the HIV epidemic, and adapt these lessons to the relevant sociopolitical context.

The research on child bereavement support is sparse, but there are brief evidence-based interventions that could be adapted and scaled up[3]. In our study[1], we found that three-quarters of those orphaned by COVID-19 in the United States were adolescents, so working through school counsellors could be a feasible way to reach a large population with trauma-informed care.

Individualistic societies lean towards supporting children with counselling, and this might be necessary for many. But research from the HIV response shows that supporting the family is also crucial: carer and household factors are key determinants of child outcomes[12]. A promising strategy is to deliver 'cash plus care'[13]. This approach aims to strengthen the family's economic capacity and deliver complementary interventions to improve the quality of care, such as by enhancing parenting skills[14,15].

Globally, interventions that provide cash benefits have been shown to improve orphans' health and psychological and educational outcomes[16]. In Tanzania, for example, orphans who were randomly selected to receive cash transfers demonstrated a 22 percentage point increase in primary-school completion; the programme similarly benefited other children living in poverty[17]. A Kenyan study showed that government cash transfers reduced anxiety and trauma symptoms among orphans[18].

"The scientific community must step up to help tailor current actions."

In the United States, new federal policies, such as the temporary expansion of the child tax credit, will raise some families out of dire poverty. Social security is selectively available to children who lose parents, and has been shown to improve their education and lifetime earnings[19]. However, less than half (45%) of all orphaned children take up this support[19]. We need initiatives that proactively identify eligible children and that help families to navigate the application process. Many others are left out because their parents earned too little, immigrated too recently or were homemakers. Hence the need for policies that ensure universal economic support for families in poverty.

Studies of adversity show that a stable, supportive carer is often a key determinant of resilience in children[20,21]. With a parent's death, a child loses one of the most important adults in their life. The surviving parent (or other carer) carries a huge burden: helping the child to cope with loss while navigating their own grief, legal matters and often a full-time job. Expanding access to bereavement leave would help. In the United States, bereavement is not yet covered by the Family and Medical Leave Act.

Another evidence-based initiative that could be made more widely available is positive parenting programmes. These have been shown to help carers form a strong, nurturing relationship with a child who has experienced adversity, including recent bereavement[21]. A new initiative, COVID-19 Playful Parenting, brings together evidence-based and open-access resources that are geared towards improving child–carer bonds, reducing stress and violence, and talking about COVID-19 (www.covid19parenting.com). None directly addresses bereavement, yet.

All of these recommendations are inclusive. Investing in school counsellors, families' financial stability and parenting programmes will benefit a large range of vulnerable children and families who are struggling through the COVID-19 pandemic — not just orphans.

Research gaps

Much has changed during the pandemic; we can't just draw on past research to inform our response. Early interventions are crucial to reducing trauma and promoting future health[9]. The scientific community must step up to help tailor current actions, and work to fill the following research gaps.

Collect data on how the pandemic changes orphans' needs. Children orphaned by AIDS had worse mental-health outcomes than did children orphaned by other causes, possibly because of the stigma and isolation of losing a parent to the disease[6]. Data should be collected to determine whether children orphaned by COVID-19 experience similarly disproportionate impacts.

One difference might be baseline stress: the pandemic has reduced social connectedness, closed schools and created economic insecurity. Another issue is re-traumatization. About 10% of children develop prolonged traumatic grief under normal circumstances[22]. Today, everyone, everywhere is talking about COVID-19, providing constant reminders and triggers for grief.

Identify services and resources that best reduce harmful effects. The rich global literature on childhood adversity and bereavement provides a sense of which types of support might help children who have lost a parent. In some nations, there has been action towards many programmes that could help, such as a temporary expansion of the child tax credit and renewed interest in family leave. This is an opportunity to evaluate what is working for vulnerable children and families, and to push for science-based policy.

Observational studies, particularly those using causal analyses, can quickly evaluate existing programmes to identify those that work. Randomized controlled trials (RCTs) can rigorously test single, new initiatives. For

ZOHRA BENSEMRA/REUTERS/ALAMY

An infant whose parents died of ebolavirus is cared for by an Ebola survivor in Beni, Democratic Republic of the Congo.

COLIN MCPHERSON/CORBIS/GETTY

A carer swims with a baby orphaned by HIV in Eswatini, which in 2019 had the highest prevalence of the virus in the world.

instance, RCTs focused on orphans have shown the effectiveness of trauma-informed therapy in Zambia[23], economic empowerment in Uganda[24] and a family bereavement programme to enhance resilience in the United States[25].

Research disparities. Our research[1] found that Black children are more likely than white children in the United States to experience parental death: Black children make up 14% of the US population, but comprise 20% of children orphaned by COVID-19. This mirrors long-standing trends: before the pandemic, one study estimated that Black children were two to three times as likely as white children to lose a parent, contributing to disadvantage throughout life[26]. Black children are also 59% less likely to receive survivor benefits through social security; those whose parents were born outside the United States are even less likely to benefit[19]. Generating this type of evidence is the first step in advocating for a more equitable response.

Create a longitudinal cohort. We need research infrastructure that can capture data on how orphaned children are doing now, and that can follow them into the future. A longitudinal cohort is a flexible tool for identifying emerging challenges (through epidemiological surveillance), quickly assessing the potential of interventions (through observational data and pilot studies) and testing programme options rigorously (through RCTs that differentiate effects by ethnicity, age, gender and disability status). Longitudinal cohorts, such as the Orphan Resilience Study in South Africa[6], helped to ground the HIV response in science.

Rapidly fund new research. To fill the gaps described, the field requires a funding mechanism that is nimble enough to respond to new crises, and that values immediate, real-world benefits. Although there are some pockets of money for rapid study, many depend on being able to bend existing projects to new aims. Moreover, funding is largely targeted at scientific novelty and innovation — not necessarily on immediate value for society.

We have been at this crossroads before. In the 2014 Ebola outbreak in West Africa, an estimated 9,600 children under 15 were orphaned[27] while living in fear of a fast-spreading pathogen and under extreme social isolation because of lockdowns. Little systematic research was conducted on these children — a missed opportunity to learn and innovate. This time, to help children orphaned by COVID-19 and by the next emergent pandemic, we need to base our response on data collected during the crisis. And we need funding mechanisms that can match this pace.

Act now

Integrating research and programmes to assist children orphaned by COVID-19 would be a huge undertaking, but it is not without precedent. There is a fund to meet the mental-health and educational needs of the 3,000 US children who lost parents in the terrorist attacks of 11 September 2001, for example (see www.ttof.org).

As part of the global HIV response, the US government created the President's Emergency Plan for AIDS Relief (PEPFAR). Ten percent of its US$5.4-billion bilateral-aid budget is dedicated to programmes for orphans and vulnerable children globally (see go.nature.com/3f8jgrd).

PEPFAR was launched in 2003 amid a global AIDS emergency. Governments, scientists and communities knew they had to take swift action to support orphans, but there was no evidence base to guide efforts[12]. In the two decades since, robust research has helped the field to evolve and deliver more-effective programming.

It's time to build on those lessons to support children who have been orphaned by COVID-19.

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