

Don't Forget the Children

By Colette C. Mull, MD, MA

Twenty-two percent (22%) of the US population is under 18 years of age.¹ Fewer children than adults are contracting COVID-19 and the majority of affected children are less ill than adults. Between February 12 and April 2, the US Department of Health and Human Services/Centers for Disease Control and Prevention, found that 2,572 (1.7%) of 149,082 reported US cases, for which age was known, involved children under 18 years of age.¹ As pediatric emergency medicine physicians, in contrast to our colleagues who care for adults, my co-workers and I are witnessing dramatic drops in pediatric emergency department (ED) volumes and acuity during these times. Public health efforts to have only the sickest seen in the ED have been successful. Many overlapping healthcare worker shifts have become redundant and therefore have been cancelled. From my pre-pandemic 8-hour shifts of at least 15-20 sick children/shift, I am currently seeing no more than 5 patients per shift when I do work. Although it is truly wonderful that pediatric COVID-19 morbidity and mortality rates are so low, it is the effects of quarantine on families that keep my colleagues and I up at night.

In 1995, a trailblazing study by the CDC and Kaiser Permanente culminated in the identification of the concept of “adverse childhood experiences” (ACEs).² ACEs were defined as hardships encountered during childhood (0-17 years), falling into the categories of physical and emotional abuse, neglect, and household dysfunction.² Since then, the definition of an ACE has been broadened to include witnessing the manifestations of adults under stress, (e.g. violence, depression, anxiety, substance misuse, suicide), and living in a household or community where basic human needs, such as respect, love, food, and shelter, are not consistently met. ACEs induce “toxic stress” by stimulating the body’s stress response, in turn affecting its immune, metabolic, and cardiovascular functions.^{3,4} The number of ACEs in a person’s life correlates highly with the amount of toxic stress experienced by that person, and puts that person at increased risk of engaging in unsafe behaviors and developing chronic diseases. ACEs have also been linked to poor academic achievement, unemployment, poverty, and/or early death by up to 19 years.

The toxic effects of stress on children may begin as early as in-utero. In a recent Washington Post opinion piece,⁶ pediatric toxic stress experts, Leonardo Trasande MD, MPP and Benard Dreyer MD, explain that stress-induced endocrinologic disruption of brain and body systems may result in:

- Prematurity and its complications (e.g. persistent poor lung function)
- Maternal transmission of stress or depression to infants
- Poor diet and decreased physical activity leading to weight gain and an increase in risk of heart disease
- Impairment of emotional regulation and cognition in older children
- Increased risk of mental illness, especially in previously traumatized children
- Adolescent drug abuse, crime, and violence.

Based on studies of prior disasters, stress has been found to affect the health of future generations via stress-induced changes in gene expression which may amplify the risk of developing certain diseases.

In non-pandemic times, 1 in 2 children or 1 billion children worldwide suffer child abuse and/or neglect;⁶ in 2018, child maltreatment in the United States claimed the lives of 1,770 children.⁷ During the COVID-19 pandemic, many families are facing new stressors, such as isolation, serious illness, unemployment,

food and shelter insecurity, and closed schools. Isolation and family stress are leading risk factors for child abuse and neglect. Sheltering in place increases the risk of intimate partner violence, which itself is strongly associated with child abuse and neglect. In these instances, children may suffer in myriad ways: constant fear and anxiety, violence directed at the child, injuries from “getting caught in the cross-fire”, and long-term developmental and behavioral maladaptation.

Historically, we have seen that disasters come with an increase in rates of non-accidental injury in children and intimate-partner violence.⁸ In the aftermath of 1999’s Hurricane Floyd, North Carolina’s affected counties witnessed a fivefold increase in the number of cases of traumatic brain injury in children under 2 years of age. Intimate-partner violence and sexual violence were seen to increase in the aftermath of Washington’s Mount St. Helens’ volcano eruption (1980), the Philippines’ Mt. Pinatubo volcano eruption (1991), and Nicaragua’s Hurricane Mitch (1998). Sexual violence and human trafficking have also been reported in isolated and stressed communities such as refugee camps.

Though unequivocally necessary for physical health, pandemic-mandated quarantine weakens the child welfare safety net by virtue of isolating children from school staff (e.g. teachers, social workers), health care providers, and childcare workers. In our society, these compassionate professionals typically serve as the eyes and ears that screen for child abuse and neglect. City and state child welfare agencies have reported up to a 30-50% drop in reports of child abuse and neglect. On the other hand, pediatric emergency departments have seen an uptick in visits for child maltreatment evaluations. Frontline child welfare workers cannot visit at-risk households without exposing themselves and their clients to the possibility of contracting the virus. Ronald Richter of the Jewish Child Care Association recently characterized this challenge as trying to provide “human services without human contact.”⁹ Virtual communications are a poor substitute for in-person evaluations.

Mitigating violence in the lives of children begins in our homes.¹⁰ The American Academy of Pediatrics (AAP) recommends that parents (caregivers), *as best they can*, take care of ourselves by adopting a healthy diet, making time for regular exercise, getting plenty of sleep, and connecting daily with members of our support system.¹⁰ If we are working from home, it is imperative that we set clear boundaries and expectations to counter our children’s desire for more attention. Using any form of corporal punishment, even spanking, may fuel child aggression, poor self-control, delays in brain development, and feelings of insecurity. Frustrated and/or anxious children will likely misbehave and we may not realize that we are intensifying disciplinary consequences secondary to our own frustrations and anxiety. Preventive measures for us to take include keeping our children busy with healthy activities, maintaining an open dialogue about the pandemic and our child’s fears of parent or own mortality, continuing with the use of the time-out tool (1 min per year of age), and responding in praise of good behavior while at times ignoring bad behavior. The AAP recommends 3 questions that parents can use to help quell their own panic and impulsive behavior when they face challenging interactions with their children and other family members.¹⁰

1. *Does the problem represent an immediate danger?*
2. *How will I feel about this problem tomorrow?*
3. *Is this situation permanent?*

The AAP encourages those on the receiving end of a communication with a distressed parent to respond with an offer of support while looking out for signs that the parent has reached an emotional *breaking-point*.¹⁰ Especially important when in contact with new parents, we should assist parents in engaging the help of their child's pediatrician or family physician or a faith leader.

What else can we do to help break the cycle of violence in a child's life, during and after this pandemic? On a macro level, small actions add up to enormous impact.

- Share this blog with a friend or post it on a social media platform.
- Forward the article to a parent or caregiver struggling to maintain a healthy home environment while in quarantine or share some content in your next communication with that person.
- Reach out to one of the many organizations engaged in protecting child welfare and offer your help or give a donation. For example,
American Academy of Pediatrics (AAP) <https://services.aap.org/en/philanthropy>
Child Welfare COVID [ChildWelfareCOVID.org](https://www.childwelfare.gov/covid)
Children's Defense Fund <https://www.childrensdefense.org>
National Child Abuse Coalition <https://nationalchildabusecoalition.org>
Physicians for Social Responsibility <https://www.psrphila.org>

And don't forget the children. Thank you.

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