Assessing the Impact of COVID-19 on Children and Youth

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As the COVID-19 pandemic continues to change the landscape of life, little attention has been given to children and youth. While most have been saved from the extreme medical consequences of the disease, COVID-19 is still having profound effects on children and youth. Regardless of age, they face family illness, death, loss of income and support, and the closing of schools, childcare centers, and after-school programs. The disruption of daily routines and social distancing leads to loss of contact with relatives, friends, peers, and important adult role-models including teachers, coaches, and counselors. The cumulative effect of these losses are significant. They are not mentioned in the news briefings or public health statistics that have become our daily reference points. We would like to bring attention to some of the ways that the pandemic—while not directly causing significant child morbidity and mortality—is profoundly influencing the health, development, and well-being of our children.

Education

Children are experiencing wide disparities in access and quality of education, depending on administrative and teacher resources, availability of learning tools, and support at home. Some children are expected to spend up to seven hours of screen time per day in learning applications. The short- and long-term effects of this amount of screen time on children's brain development is unclear, although evidence suggests increased anxiety, behavior problems, and executive functioning deficits. Other children are not engaging in any educational experiences, preventing them from meeting necessary learning standards. The inequity in access to technology has never been so obvious, and has never had such significant consequences.

Family Economics and Functioning

A major impact of this pandemic is the effect on family economics. Families' basic needs are jeopardized. While this effects all families, increased burden has been seen in poor families. A recent poll by the Pew Research Center finds that more than half of low-income households

report unemployment or underemployment.¹ Over 60% of Hispanics and 44% of African Americans face this predicament. The economic fallout has resulted in surges in housing and food insecurity,² and suboptimal nutritional choices.

Besides health care workers, those most at risk for infection are millions of 'essential' and lowwage workers; a disproportionate number of whom are persons of color and parents. Lacking job protections and unable to work remotely, these workers are forced to pick the lesser of two evils – go to work and risk infection (and possibly passing it on to their families) or risk losing their job. For many immigrant families, the combination of lost wages and ineligibility for unemployment increase their vulnerability.

The economic and pandemic-specific factors described above lead to increases in parents' stress. Parents whose emotional health is taxed daily may not have psychological resources to attend to their children's demands or the capacity to play, talk, and engage with them in cognitively stimulating activities, or help with school-work. And data suggests that one of the best predictors of children's stress and anxiety is their parents' level of stress and anxiety. Parental stress can also result in more conflictual adult relationships and in harsher, more punitive, and less responsive parenting.

Increased family stress levels have significant consequences. There have been reports of upticks in child abuse cases seen in hospitals during the first months of the pandemic. In times of past social stress like natural disasters and economic recessions, the incidence of child maltreatment rose.³ Recent anecdotal reports of increases in extreme cases (such as head injuries) ending up in hospital emergency departments are just the tip of the iceberg; most child maltreatment concerns are reported by third party individuals outside of the household (teachers, guidance counselors, neighbors, daycare staff, etc.). Lack of outfacing contact due to social distancing likely results in *under-reporting* of most cases of child abuse and neglect occurring during the pandemic. Aside from its effect on child abuse reporting, social distancing results in children who are in sub-optimal home environments not having the "pop-off valve" of peers, mentors, and community to buffer the toxic stress they are experiencing ay home.

Access to Health Care and Mental Health Services

While children suffer less morbidity and mortality from COVID-19, the pandemic can have indirect effects that put children at greater risk of poor health. Lockdown and social distancing result in decreases in physical activity. Limited opportunities for families to shop and family financial strain can lead to sub-optimal nutritional choices. Limitations in "outside time" may put children at higher exposure to secondhand smoke. As schools move to virtual classrooms, the deleterious effects of increased screen time (e.g., headaches, visual strain, and poor sleep) may occur.

Limited use of preventive health care during the pandemic may also have consequences. There are concerns that decreases in well child visits may result in lowered immunization rates. While herd immunity in the United States will likely lessen the impact of delayed immunization, other areas of the world where baseline immunization rates are lower may see disease increases in the future.

While access to health services is challenged during this pandemic, some have advocated for expansion of telehealth services as a potential fix that allows for increased access. While the potential for telehealth remains great and might work towards decreasing health care disparities,

the fact remains that access to the technology required for telehealth is unequally distributed and may become a new source of health inequity.

Perhaps the greatest health risk that the pandemic presents to children and youth is in mental health. A recent study showed that parents are reporting worse anxiety symptoms and youth are exhibiting a 42% increase in externalizing behaviors. As youth start experiencing negative mental health symptoms due to isolation, increased stress exposure, and trauma, there are few places to go for support. Children have lost access to critical support systems in schools, religious communities, and clinics. For youth who already have mental health diagnoses or special needs, and require these supports to thrive, this risk is even greater. Many chronic conditions are not being attended to as outpatient services are limited. Even when open, families might not seek out services for fear of catching the virus. Children with special needs such as autism, developmental delays, ADHD and physical disabilities rely on daily structured routines and specialized therapies that may not be available.

These accumulative stressful experiences, and lack of access to important health and social service buffers can negatively impact children's neurocognitive and physical development, with cascading effects in self-regulation, self-concept, social cognition, academics and health.⁴ These negative effects might be heightened as a result of the duration and dosage of the stress, as well as it occurring during key sensitive developmental periods (e.g., prenatal development, infancy, puberty) or social transition periods (e.g., transition into school, transition into adulthood).

Keep Children's Health in the Picture

In these unprecedented times in our lives, we cannot forget that COVID-19 poses significant threats to children's health, even if they are not at the highest risk for direct morbidity and mortality. The indirect and secondary consequences of this pandemic are profoundly affecting children through economic hardship, educational barriers, family stress and dysfunction, limited access to preventive health care, and increased mental health concerns. While these issues are affecting all children, those who are poor and of color are disproportionately affected.⁵ This pandemic is putting a magnifying glass on the root social and behavioral determinants of health disparities.

Children--one of the most vulnerable groups in our society--are suffering severely. The effects will be seen now as well as into the future, as these toxic stressful experiences become embedded into the psychological and physiological matrix of the development of a generation of children.

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