

Hidden Superheroes: Children and Adolescents in the COVID-19 Pandemic

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The pandemic has left its unmistakable impact on each of our lives and those of our patients. As a post-graduate year 3 (PGY-3) at Rush University Medical Center, the tail-end of my psychiatry residency training and my entire child and adolescent psychiatry fellowship training was forever altered. My (Leora Massey) patients each day tell me about their unique experiences growing up and attending school during a pandemic. Few other topics have impacted people of all ages and backgrounds as significantly as the COVID-19 pandemic. This article will examine some of the literature that illustrated the profound impact that COVID has had on children and adolescents since March 2020, revealing hidden superheroes of this pandemic—the pediatric population. This research is especially pertinent, given the US Surgeon General’s advisory declaring a Youth Mental Health Crisis on December 7, 2021.¹ At the start of the pandemic, health care and other essential workers were frequently referenced as the superheroes of our society. I would like to also acknowledge the struggles of children and adolescents – those who might have stayed home but were also tasked with the crucial work of continuing to learn, mature, and develop during months of social isolation. They, in fact, might be considered superheroes as well.

Prior to the Pandemic

Even before the COVID-19 pandemic, mental health challenges were the leading cause of disability and poor life outcomes in youth, with up to 1 in 5 American children under 18 years old in the US with a reported mental, emotional, developmental, or behavioral disorder.² Adolescence is a highly dynamic time with abrupt physical changes, self-regulatory capacity, and social challenges. It is also a time of vulnerability in terms of development of mental illness, with most psychiatric diagnoses presenting in individuals less

than 24 years of age. In 2016, of the 7.7 million children with treatable psychiatric disorders, about half did not receive adequate treatment.²

Public health crises are known to cause mental health crises even in children without mental illness and exacerbate symptoms in those with diagnosed disorders. Natural disaster further disrupts the ability to access care. The pandemic has also affected adolescent development in a multitude of ways: altering physical activity, screen time, sleep, and diet, in addition to all the co-occurring societal changes. Among adolescents, there was found to be a correlation between depressive symptoms and negative COVID-19 experiences.³ Understanding the impact of COVID-19 will be essential to create and implement interventions to reduce psychiatric symptoms throughout the duration of the pandemic, as surges occur and remit, along with social distancing guidelines

During the Pandemic: Anxiety and Depression

The pandemic resulted in new onset psychiatric symptoms for many adolescents. One study examined the global prevalence of depression and anxiety symptoms in children and adolescents during this time. As of August 2021, the prevalence of these diagnoses had doubled compared with prepandemic estimates. A meta-analysis of 29 studies including more than 80,000 youth found that the prevalence of clinically elevated depression and anxiety were 25% and 20% respectively. Prevalence rates were notably higher when collected later in the pandemic, in older adolescents, and in females.³

It was also found that children reported anxiety scores more than 5 standard deviations greater than average pediatric populations prior to the pandemic. The

increase in anxiety was linked to decreased physical activity, increased screen time, and sedentary behavior.⁴

A complex interplay of factors that negatively impacted children's psychological well-being during the pandemic included: disruption of routines, loss of caregiving relationships, virtual schooling, and increases in the development of multiple Adverse Childhood Events (ACEs) clustered in time, such as abuse, neglect, parental separation, and substance use within the home. There was also found to be a cumulative, dose-response relationship to poor physical health and mental health because of reduced physical activity.⁴

Some studies demonstrate that stay-at-home orders correlated with upticks in mental illness in adolescents, which may point to the strong link between social isolation and psychological well-being.⁵ Talking with friends and prioritizing sleep had a protective effect against anxiety for healthy adolescents.⁶ One study found that a particularly vulnerable population to mental health problems was children of families with income loss.⁷ Young females in families with income loss were found to have the highest risk for developing depression, anxiety, and obsessive-compulsive disorder due to stay-at-home orders.⁷

Quarantined youth were found to be more likely to demonstrate regression of milestones, substance use disorders, and suicidal ideation.⁸

Grief and Loss

Given the staggering numbers of deaths from the pandemic, children and adolescents have been affected by loss in unprecedented numbers. As of October 2021, 175,000 children in the US have lost one or both parents and a grandparent caregiver to COVID-19. The CDC reported that one US child loses a parent or caregiver for every four COVID-19 deaths. There has been an increased risk of complicated grief due to reduced hospital visitations and traditional funeral practices, among other societal changes to mourning as a result of social distancing.

The Struggles of Parenting in a Pandemic

It is well-known that children take cues from their parents, and so worsening parental mental illness during the pandemic directly affected child well-being. One study looking at March to June of 2020 demonstrated that over the course of the pandemic, 27% of parents reported worsening of their own mental health, 14% of parents reported worsening behavioral health for their child, and 10% of families reported both.⁹ In June of 2021, the CDC released a Morbidity and Mortality Report about the toll taken on parents and caregivers of adults during the pandemic. Their report showed 5-fold increased odds of negative psychiatric symptoms in this population and found that overall, 70% of all caregivers reported recent adverse mental health symptoms, including symptoms of anxiety or depression, COVID-19 Trauma, Stressor Related-disorder, or suicidal ideation. This was based off data from 10,444 US adults surveyed during 2 monitoring periods: December 2020 and February – March 2021.¹⁰ In many cases, the mental health of parents worsened because of socioeconomic hardships.⁹ Most of these parents who reported worsening mental health also reported that their children were experiencing mental health problems as well.¹¹ On the other hand, families with strong ties promoted mental well-being in children. Adolescents who reported social support from their parents displayed increased positive affect and decreased negative affect.¹²

Conclusion

Having started (and now nearly completed) child and adolescent psychiatry fellowship in the pandemic, there is a lot that I (Leora Massey) have lost the ability to observe: children playing with office toys in our clinic rooms, the opportunity to have in-person case conferences, and a consistent sharing of didactics with all of my co-fellows together in-person. However, there is also much that I have gained: becoming adept at telepsychiatry, learning to use technology such as screen-sharing and the Zoom Whiteboard to connect with patients, and getting a glimpse of family interactions within the home environment. Knowing now how the post COVID-19 world has drastically changed the way that we deliver

mental health treatment to patients of all ages, I doubt that I would choose to train outside of a pandemic. Through this lens of pandemic-era child and adolescent psychiatry fellowship, I have seen that children and adolescents who have lived through the pandemic are resilient. To name only a few of their stressors, they have and are still battling depression and anxiety, trying to learn through online school with all its obstacles and challenges, grieving the loss of loved ones, undergoing social isolation, and experiencing financial stress within their families. We often hear that health-care workers are the pandemic's superheroes, but if we look underneath the masks on the playground, school cafeteria, and classrooms, we might find another group that deserves that title of superhero as well—that of the pediatric population.

Take Home Summary

The impact of the pandemic on youth is so profound that the US Surgeon General advisory declared a Youth Mental Health Crisis on December 7, 2021. Over the past three years, pediatric anxiety and depression increased and parental mental health declined. Children and adolescents have exhibited remarkable resilience facing pandemic-related challenges.

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