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A trauma-informed approach to the pediatric COVID-19 response

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To effectively care for children during COVID-19, pediatricians need to appreciate the stress and potential traumatic effect of the pandemic. By employing the “CARES” framework, pediatric providers can openly discuss the pandemic with patients and families, collaborate to build resiliency, and encourage engagement in activities and resources that are protective. This approach could potentially prevent both the short and long term health consequences resulting from the toxic stress and traumatic exposure of COVID-19. Pediatricians are uniquely positioned to mitigate the extent to which the pandemic affects the nation’s children and we believe it is our responsibility to do so, to uphold the health and wellness of pediatric patients across their lifespan.

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Introduction

The coronavirus disease (COVID-19) pandemic and its related public health measures have undoubtedly affected the psychological well-being of children. In the United States, the national survey, “Well-Being of Parents and Children During the COVID-19 Pandemic,” highlighted that 14% of respondents reported worsening behavioral health for their children since the start of the pandemic,1 a phenomenon also reported in China.2 In this commentary, we explain how pandemic-related well-being effects can be explained by the neurobiology of trauma and toxic stress. We then introduce a trauma-informed framework that pediatricians can use in clinical practice to promote the health, well-being, and safety of children during the COVID-19 pandemic and beyond.3

The neurobiology of trauma

The Substance Abuse and Mental Health Services Administration defines trauma as events or circumstances that are experienced by individuals as physically or emotionally harmful with lasting effects on health and well-being.3 Traumatic exposures can cause sustained activation of the body’s stress response system, or “fight, flight, or freeze” response.4 When combined with the lack of important resiliency factors that can buffer tolerable levels of stress, the traumatic exposure can lead to toxic stress.5,6 In contrast to positive and tolerable levels of stress, the neuroendocrine shifts associated with the toxic stress response can disrupt the foundation for optimal brain growth and functioning. In the immediate period, this may manifest as a change in behaviors or symptoms of anxiety and depression.5,6 Over the long term, the downstream effects of the stress response can disturb whole-body homeostasis, leading to inflammation and activation of pathways causing disease.7,8 As the seminal adverse childhood experiences study demonstrated, exposure to childhood trauma can lead to an increased risk for a range of diseases such as asthma, cardiovascular disease, cancer, and diabetes, which can lead to increased morbidity and even premature death.9

Toxic stress, trauma, and COVID-19

During COVID-19, uncertainty, concern, and isolation are common in the lives of many families, as they balance upholding wellness with the responsibilities of childcare and employment in a landscape of limited

Abbreviations: COVID-19, Coronavirus-19
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resources. These pandemic-related conditions can lead to high levels of stress, which can be even more pronounced in low-income and minority communities, for whom the stress of COVID-19 can be layered on additional adversities and in which lack of access to community resources can intensify the impact of the stressors related to COVID-19.

While the toxic stress and traumatic effect of pandemics have been well established, COVID-19 has brought new and unforeseen challenges, not characteristic of prior pandemics. Children no longer engage in their daily routines, have lost access to many of their regular environments, and are not allowed to play, hug, be held, or visit with friends and family. The necessary public health measures related to COVID-19 effectively remove access to the precise resiliency and protective factors that help buffer traumatic experiences, thereby increasing the potential for the stress associated with COVID-19 to reach toxic levels.

As stated, toxic stress related to traumatic exposures can lead to negative physical and mental health outcomes across the lifespan. With COVID-19, this effect has been underscored by the increase in behavioral health symptoms in children. If pediatricians recognize the potential traumatic effect of COVID-19 and respond appropriately with a trauma-informed approach to care, they may be able to intervene and safeguard against both the acute and lifelong negative health outcomes for our patients.

**A trauma-informed response to COVID-19**

The central tenet of trauma-informed care is to consider what happened to a person, instead of what is wrong with a person. Trauma-informed care actively seeks to promote resilience to derail the pathways that lead from traumatic exposure to toxic stress and ultimately poor health outcomes. It strives to uphold the principles of respectful, patient-centered care by prioritizing trust and collaboration and promoting strengths. We propose a simple framework, “CARES,” to guide pediatricians in employing a trauma-informed approach to care in the response to the COVID-19 pandemic.

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they do not appreciate the critical relationships among these concepts. As the word “trauma” may have the potential to be retraumatizing or difficult for some patients to relate to, pediatric providers can substitute more neutral terminology such as “(toxic) stress” that alludes to the neurobiological impact of trauma. Pediatricians can highlight for parents and patients that through engagement in healthy, resilience-building activities like those described above, they have the ability to support their own wellness and combat the potential health effects of the COVID-19—related stress they may be experiencing.

S: Self-Care. By recognizing the trauma and stressors in their own lives, pediatric providers can strengthen our ability to meet the challenges posed by COVID-19. The CARES framework can be used for a self-check. Concerns about our own health, risks of bringing the virus home to loved ones, social isolation, and personal and financial challenges have to be addressed. We cannot sacrifice our own health for the well-being of our patients or we will fail at both.

The “CARES” approach can be applied during any number of clinical encounters, but can be especially helpful in targeting critical issues during this time. Recognizing that the families that may need this approach most may not be seeking care in this time, we encourage the creation of systems to reach out to all patients/families to offer them the opportunity to interface with their healthcare providers in innovative ways. The telehealth platform can help to better envision what patients experience and can provide windows of opportunity for meaningful conversations and insights into stressors and barriers to healthy living.

Conclusion

To effectively care for children during COVID-19, pediatricians need to appreciate that the pandemic has the potential to be a traumatic exposure for children with lasting physical and mental health effects. This understanding is critical as it provides not only an explanation for the increase in well-being and mental health concerns already documented during the pandemic but also a clear way forward, with a trauma-informed approach. By employing the “CARES” framework, pediatricians can openly discuss the pandemic with families, collaborate to build resiliency and encourage engagement in activities and resources that are protective. In this way, pediatricians can proactively intervene to turn experiences that could have caused toxic stress to instead cause tolerable levels of stress, which is less damaging. This approach could potentially prevent both the short- and long-term health consequences resulting from the traumatic effect and toxic stress exposure of COVID-19.

Over time, COVID-19 can be as damaging as the traumatic exposures included in the adverse childhood experiences study, given the chronic stress that the pandemic and its related public health measures have incited for our pediatric patients and their families. Pediatricians are uniquely positioned to mitigate the extent to which the pandemic affects the well-being of the nation’s children and we believe it is our responsibility to do so, to uphold the health and wellness of pediatric patients across their lifespan.

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Declaration of Competing Interest

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