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Foreword

COVID-19 Pandemic, Children, Pediatricians, and the Future



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Severe acute respiratory syndrome coronavirus 2 (more widely known as COVID-19) appears to have made its global debut in December 2019 in China.¹ To date (July 4, 2021), 172,612 publications regarding COVID-19 have been recognized by the United States National Library of Medicine (accessible through PubMed). To put into perspective the massive amount of work that this represents over such a short time, let us turn to the publications regarding the human immunodeficiency virus (HIV), also a pandemic of enormous and continuing global recognition, importance, and cost. This disease was first recognized in June 1981. To date, after forty years, there have been only 462, 827 publications regarding HIV,² which is only 2.6 fold the number of publications concerning COVID-19 after only 1.5 years.² What makes COVID-19 especially concerning?

There are many reasons. First, it is difficult to identify a segment of the world's population that has not been impacted by the COVID-19 Pandemic. It is difficult to identify a professional group that has not been impacted by the COVID-19 Pandemic. It is difficult to imagine a curriculum, a technology, or a local, state, national, or global health policy that has not in some way been impacted by COVID-19. Indeed, the lives of virtually every person in every country across the world have been fundamentally uprooted by COVID-19, and may remain so for many more years to come.

Second, it is important to specifically address the consequences of the pandemic on all subpopulations, but most especially on children. Children's many needs, both preventive and treatment, include but are not limited to medical, economic, educational, emotional, and developmental domains. Moreover, until the emergence of some of the more recent mutations of COVID-19, children were misperceived as being less impacted by COVID-19 than were adults, especially elderly adults. While this perception may have accurately assessed the likelihood of serious biologic trauma inflicted on children by COVID-19, it was never a correct characterization of children's

vulnerabilities to all the consequences of the disease. Children are susceptible to many of these consequences, some of which can last for years. Moreover, as COVID-19 variants emerge, serious illness among children has been increasing.³

In recognition of the need to specifically address the needs of children in the context of a global pandemic, this issue of *Pediatric Clinics of North America* offers a panoramic view of the possible impact of COVID-19 among children, including potential aggravation of preexisting health disparities; mental health and substance abuse effects; vaccine effects (both desired and undesired); changes in the approach to pediatric care, including vaccinations; impact of COVID-19 on other major pediatric health issues, including diabetes, asthma, neurologic disorders, and such; and differences in broad public health preventive measures between children and adults.

We recognize that each of the descriptions provided in this issue of *Pediatric Clinics of North America* only reflect our understanding of the pandemic up to a specific moment in time. Some of the causal relationships we describe in this issue may already have undergone reanalysis by the time of printing, and many more will change in the future. Both the disease itself and/or our understanding of the factors that mitigate or aggravate the disease or its impact in certain circumstances will vary over time or by population. We have already seen evidence that many treatments and ameliorative agents that initially appeared promising did not ultimately retain this ability over time. We are also well aware that the virus mutates quickly and effectively, thereby impacting the potential of the affect the vaccine.

Finally, we know that population groups varying by race, nationality, income, educational background, and so forth may have very different understandings of the safety and efficacy of the potential treatments and prevention options available. It is our responsibility as pediatricians and other child health care advocates to recognize these differences in their acceptance of existing and future drugs and vaccines and to work with the families, parents, and children expressing such views to help them understand our perspectives and help us understand their perspectives. We must let them know that to the degree possible, our perspectives and recommendations will be specific to each of their children and may change over time as we gain greater understanding of the disease and as more options become available. For now, we believe that among the available vaccines, drugs, and other treatments currently available, the approaches that we are recommending are what we believe to be in the best interest of their child, and in many cases these options are very effective with little or no risk to the child.

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