



Health Disparities in Children and Adolescents Living in LMIC During COVID-19 Pandemic

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Abstract

Purpose of Review The purpose of this editorial is to introduce the pediatric global health issue focusing on health disparities emerging from the COVID-19 pandemic on children and adolescents living in low- and middle-income countries (LMIC).

Recent Findings As the COVID-19 pandemic ensues, children and adolescents living in LMIC have been disproportionately affected by socio-economic and mitigation practices, leading to widening disparities in health and the social determinants of health that influence their well-being.

Summary This pediatric global health issue brings to bare the extent, range, and nature of these health disparities, integrated with expert viewpoints, to prompt critical dialogue to address these complex problems.

Keywords Sustainable development goals · Global health · Low- and middle-income countries · Pediatric · Health outcomes

“Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.”- World Health Organization Constitution [1]

As the COVID-19 pandemic ensues, it continues to disrupt essential health services and is forecasted to undermine the gains made in child and adolescent health. This is especially true of children and adolescents who live in low- and middle-income countries (LMIC), where health systems, economies, and social circumstances are often fragile [2]. Although the full impact of the COVID-19 pandemic has yet to be realized, children and adolescents living in LMIC have been disproportionately affected by socio-economic and mitigation practices, leading to widening disparities in health and the social determinants of health that influence

their well-being. This pediatric global health issue of the *Current Tropical Medicine Report* brings to bare the extent, range, and nature of these health disparities, integrated with expert viewpoints, to prompt critical dialogue to address these complex problems.

The Sustainable Development Goals (SDGs) adopted in 2015 sought to continue improving the lives of children and adolescents globally, and address the gaps from its predecessor’s agenda, the Millennium Development Goals (MDGs) [3]. The SDGs focused on the health of children and adolescents can be separated into those that directly measure health status (e.g., under-five child mortality) and those that indirectly measure constructs which promote over well-being (e.g., education indicators) [3, 4]. There was a renewed focus on determinants of health and the converging vulnerabilities contributing to direct health outcomes, integrating efforts addressing direct and indirect global health indicators, and inclusion of adolescents, who were mostly excluded from the MDG agenda [5]. Since 2020, global efforts have been consumed by tackling the COVID-19 pandemic and have stalled progress towards many SDGs [5].

Of the 232 global SDG indicators, UNICEF monitors progress towards 35 that most directly impact children and adolescents [6]. According to UNICEF data and projections, COVID-19 has impacted this vulnerable population, with the most negative consequences impacting those living in LMIC [7••].

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The most recent estimates of indirect global health measures indicate dramatic and pervasive reversal of previous gains:

- “An estimated increase of 60 million more children,” mostly in sub-Saharan Africa and South Asia, “lived in monetary poverty in 2021 compared to 2019” as households plunged along with global economy [7••].
- Beyond monetary poverty, “100 million more children lived in multidimensional poverty (i.e. without access to education, health care, housing, nutrition, sanitation, or water)” during the pandemic [7••].
- The pandemic “worsened the malnutrition crisis and was projected to push 6.7 million children to become wasted.” Even before the pandemic’s impact on food security, progress was not on track to achieve SDG goal 2 to end hunger and all forms of malnutrition [7••].
- “At least 463 million children worldwide could not access remote learning during school closures.” Short disruptions in education can have far-lasting negative effects, including increase in inability to catch-up, increase in child marriage, and child labor [7••].
- “66% of countries reported disruption in violence against children-related services due to COVID-19.” Pandemic mitigation policies, including lockdown, resulted in increased stressors for the household and made children more vulnerable to violence, exploitation, and abuse [7••].

Direct global health measures include:

- “Almost 200,000 additional stillbirths could occur” due to the impact of COVID-19. Direct mortality from the virus has been limited, but the indirect effects from over-extended health systems, disruptions to care-seeking, and preventative interventions will contribute to increases in child mortality [2•, 7••].
- “Nearly 14 million children did not receive any vaccines in 2019,” and due to mitigation measures, about “80 million children under the age of 1 in at least 68 countries may miss out on receiving life-saving vaccines [7••].”
- “An additional 124,000 children could be infected with HIV if prevention services are disrupted for 6 months.” The significant progress against HIV/AIDS may be reversed [7••].
- UNICEF highlighted the mental health of children, adolescents, and caregivers, an area that has been historically sidelined and now greatly underscored by the COVID-19 pandemic, in its flagship report, *The State of the World’s Children 2021* [8].

These findings highlight the sobering facts of the health disparities in children and young people being amplified

by the COVID-19 pandemic. The International Society for Social Pediatrics and Child Health position statement underscores the reality of the negative health effects taking root in the current days that will likely reverberate throughout the current generation’s lifetime [2•].

In this special issue, the authors focus on reviewing diverse dimensions of health and well-being, including mental health disorders among adolescents living with HIV; child education globally and the impact of learning losses; nutrition, growth, and behavioral changes among infants, children, and adolescents; access to sexual and reproductive services and rights among adolescents and young people; pediatric HIV-differentiated service delivery programming; access to non-communicable disease and injuries services; changes in neonatal feeding strategies and impact on neonatal and maternal outcomes; and childhood immunization, vaccine hesitancy, and lessons from other pandemics. Each article examines and describes the current landscape, contributing factors, data, and considerations currently missing from the literature or discussion in the field. This issue collectively provides a comprehensive evidence base to elucidate the global impact of the COVID-19 pandemic and inform practices for ensuring the physical, mental, and social well-being of children and adolescents globally.

To promote the work of experts and professionals based in LMIC, manuscripts contributing to this issue emanated from a scholarly writing series specifically designed to promote scholarly activities led by healthcare professionals in LMIC.

Declarations

Diane Nguyen and Anna Mandalakas are the Pediatric Global Health section editors for the Current Tropical Medicine Reports. The authors have no relevant financial or other non-financial interests to disclose.

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- Of importance
 - Of major importance
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