

# Let Us Be Vigilant: COVID-19 Is Poised to Obliterate Gains in Healthy Child Development Globally

Benard P. Dreyer, MD, FAAP

In this issue of *Pediatrics*, McCormick et al<sup>1</sup> report on a multicountry observational cohort study in which children and parents were assessed multiple times from children's age 6 months to 6 years, collecting information on measures of socioeconomic status, infection, illness, maternal depression, positive parenting, and the home environment, with the outcome being child development as measured by the Bayley Scales of Infant Development at early ages and the Wechsler Preschool and Primary Scale of Intelligence at 60 months. Five trajectories of cognitive development were determined by statistical analysis. Not surprisingly, variables that represented a supportive and nurturing environment, such as emotional-verbal responsiveness of the parents, behaviors and/or environment to support learning, and environmental safety, were most strongly able to differentiate the most and least positive trajectories. Of course, other important variables were adequate nutrition and less respiratory and diarrheal illness.

There is a large literature on the relationship of interventions to support and enhance nurturing parenting as well as to improve the learning environment with better early childhood outcomes in both high-income countries and low- and middle-income countries.<sup>2-5</sup> We also know that children living in extreme poverty are likely to have poor developmental trajectories. In McCormick et al,<sup>1</sup> the

authors were puzzled that they were not able to demonstrate that their measures of wealth (household income and assets)<sup>6</sup> differentiated better and worse developmental trajectories. They point out (and I agree) that in this study, the measurement of multiple aspects of the home environment and of parenting were likely mediators of the poverty level and therefore displaced the influences associated with the variance of wealth. In addition, one of the stronger variables of the home environment, environmental safety (based on items such as the stove being in a safe area, house being relatively light and neat, and play area being free of hazards), may be a direct proxy of important aspects of assets and income.<sup>7</sup>

Understanding what assets and activities can be encouraged and supported that promote early child development is also an important task in low-income and middle-income countries. The Multiple Indicator Cluster Surveys used by United Nations International Children's Fund include questions on the young child's experience and resources (eg, how many books and toys does the child have; how often is the child read to, played with, sung to, told stories by an adult).<sup>8</sup> Use of the Multiple Indicator Cluster Surveys questionnaire for children <5 could help us understand the experience of children living in poverty in low- and middle-income countries and suggest areas for intervention.<sup>9</sup>

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Opinions expressed in these commentaries are those of the author and not necessarily those of the American Academy of Pediatrics or its Committees.

**DOI:** <https://doi.org/10.1542/peds.2020-012591>

Accepted for publication Jun 16, 2020

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PEDIATRICS (ISSN Numbers: Print, 0031-4005; Online, 1098-4275).

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**FINANCIAL DISCLOSURE:** The author has indicated he has no financial relationships relevant to this article to disclose.

**FUNDING:** No external funding.

**POTENTIAL CONFLICT OF INTEREST:** The author has indicated he has no potential conflicts of interest to disclose.

**COMPANION PAPER:** A companion to this article can be found online at [www.pediatrics.org/cgi/doi/10.1542/peds.2019-3660](http://www.pediatrics.org/cgi/doi/10.1542/peds.2019-3660).

**To cite:** Dreyer BP. Let Us Be Vigilant: COVID-19 Is Poised to Obliterate Gains in Healthy Child Development Globally. *Pediatrics*. 2020;146(3):e2020012591

Although there has been a marked reduction in recent years in the numbers of children living in extreme poverty and/or with stunting (which lead to risk of poor early childhood development), the numbers are still alarming. Sixty-five percent of children <5 years of age living in low-income countries are at risk for poor development. Although the percentages are somewhat lower in middle-income countries, ~250 million children living in either low- or middle-income countries are at risk for faulty early child development. This is 43% of all children <5 years of age across the globe. These calculations use the definition of living on <\$1.25 (US dollars) per day for extreme poverty. If one broadens the definition to those living in “moderate” poverty (living on <\$2.00 per day), the number of children at risk is a staggering 324 million or 56% of all children in that age group.<sup>10,11</sup> Although progress has occurred, almost all the decreases in risk are either in India or in upper-middle-income countries such as China, Brazil, and South Africa. There has been no progress in low-income countries or most other middle-income countries.<sup>10</sup> There are also large inequities within each country or region based on wealth that would need to be addressed if further progress is to be made. These inequities are largest in West and Central Africa and South Asia. For example, in Nigeria, there is a 37 percentage point difference in children on track for healthy early development between the richest 20% and the poorest 20% of the population. Similar inequities are seen in South Asia.<sup>11</sup> There is still much more work to be done.

In addition, the coronavirus disease 2019 pandemic is now poised to

obliterate any gains that have been made over recent years and plunge many low- and middle-income countries into increased poverty, with children being the innocent victims of economic downturns. As coronavirus disease 2019 spreads through these countries and their economies are depressed, it is estimated that there will be a 20% increase in extreme poverty leading to hundreds of millions sinking into the level of poverty they recently left. There may also be a massive increase in hunger, putting children at significant nutritional risk and leading to an increased incidence of stunting. The progress of decades could be erased in a matter of months, with dire consequences for children.<sup>12</sup>

McCormick et al<sup>1</sup> point to the way for us to monitor the trajectories of children globally and to improve their development with support for a nurturing and safe environment and adequate nutrition. We must be vigilant and keep our eyes on the prize: the continued improvement in healthy early childhood development wherever children live.

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*Pediatrics* 2020;146;

DOI: 10.1542/peds.2020-012591 originally published online August 17, 2020;

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The online version of this article, along with updated information and services, is located on the World Wide Web at:

<http://pediatrics.aappublications.org/content/146/3/e2020012591>

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