

Early childhood development: a new challenge for the SDG era



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After the success of the Millennium Development Goals and the reduction in more than 50% of child mortality in children younger than 5 years (Countdown to 2015 report),¹ the survive and thrive motto was given prominence by the Sustainable Development Goals (SDGs).² For all children to thrive, we need equitable early development worldwide, entailing that every girl and boy should have the same opportunities to fully develop their potential, which is only achievable if they have good nutrition, good health, and a rich and stimulating home environment.

In *The Lancet*, Chunling Lu and colleagues³ have done impressive work updating a head count of children at risk of poor development. With use of the same logic of a previous publication,⁴ children in conditions of extreme poverty or stunted were considered to be at risk. Their results show that, between 2004 and 2010, progress was made, and there was a reduction in children at risk, both in relative and absolute terms. Still, the situation is worrying and challenging. In low-income countries, 65% of children younger than 5 years were at risk of poor development. The proportions are less alarming, but still worrying, in middle-income countries. The authors found that, despite the substantial progress, nearly 250 million children in low-and-middle-income countries were still at risk of poor development, 63 million in India alone.

This study is important and enlightening, and reiterates the need for urgent action. But it also has important limitations for monitoring. First, it is not a direct measure of child development. This is justified by limited data for child development from low-and-middle-income countries. Also, given it is based on national level estimates of poverty and stunting, it is not possible to assess girls and boys separately, or other dimensions relevant to equity analyses.

Leading the field of national health surveys, UNICEF included in their Multiple Indicator Cluster Surveys (MICS) a set of questions related to early childhood development. 45 MICS surveys include such a module, and some of these questions are also being incorporated into new Demographic and Health Surveys. Having this population-based assessment is extremely valuable because it allows monitoring and accountability in low-and-middle-income countries. From the results

presented in the reports, we can see that Ghana is the sub-Saharan country with the highest percentage of children who have three or more books—and this is only 6.2% of all children younger than 5 years in Ghana. The average for the 11 countries in the region with data is slightly below 3%. Eastern Europe (central and eastern Europe and the Commonwealth of Independent States) and Latin America and the Caribbean, both with data for ten countries, are in a much better situation with more than 50% of children having three or more books, on average.⁵

In our 2004 Pelotas birth cohort, we have shown that socioeconomic drivers are much more important than biological ones in determining child development⁶ and cognitive ability.⁷ Poverty, low maternal education, and poor home stimulation environment are important determinants of poor development. Even in an upper-middle-income country like Brazil, simple aspects such as having a book, along with having heard a story from an adult, were items often missing in low stimulated children.

To make progress without leaving anyone behind, as we are called on to do by the Global Strategy for Women’s, Children’s and Adolescents’ Health and the SDGs, demands special strategies and careful monitoring. Girls, in some areas, are likely to be excluded from, or have limited access to schools. And the poorest children, who usually carry the highest burden of ill health are also more likely to suffer from poor development.

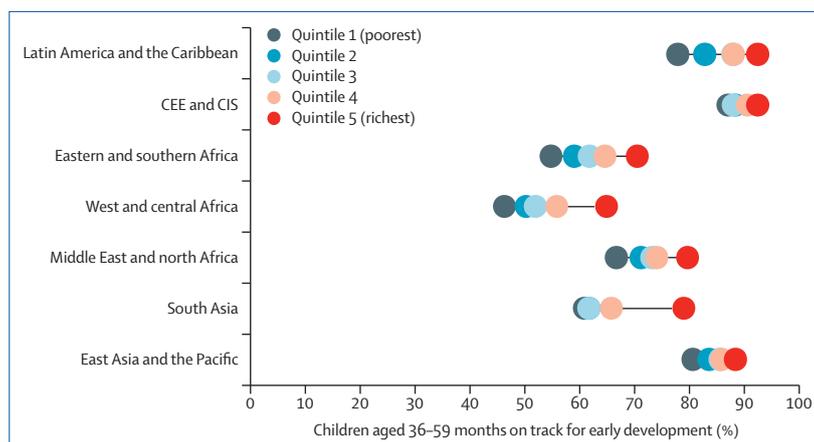


Figure: Percentage of children on track for early development, by wealth quintile, from 44 Multiple Indicator Cluster Surveys done between 2010 and 2014
CEE and CIS=central and eastern Europe and the Commonwealth of Independent States.

The MICS initiative of measuring development indicators in children aged 36–59 months can present its limitations,⁸ but at the same time it allows light to be shed on the subject. Analysing 35 countries, a recent publication showed how children in rural areas, who were stunted, who were of the poorest socioeconomic status, and who were male were generally worse off in terms of cognitive or socioemotional development.⁸

Regional differences are large, and within region inequalities are also important. We did a simple analysis of averaging the percentage of children on track for development using the early childhood development index available in recent MICS surveys, by wealth quintiles and by UNICEF regions of the world (figure). We compiled data from 41 countries with results available in their respective reports. Eastern Europe is clearly the region with the highest percentages of children on track, and the lowest inequalities. West and central Africa sit on the other extreme of the spectrum, with Nigeria presenting a difference of 37 percentage points between the richest 20% and the poorest 20% of the population. Additionally, top inequality patterns, which happen when the richest are much better off than the rest of the population, were observed in west and central Africa and south Asia. These results emphasise the need for equity to be taken into account, as averages can hide great differences between groups.

The *Lancet* Early Childhood Development Series presents a thorough review of determinants, policies, and interventions relevant to improving child development.^{5,9,10} The estimates presented by Lu and colleagues³ and the other Series authors compose a compelling picture of the challenges we face, and the priority and urgency that child development requires. Researchers, governments, and policy makers should

be fully committed to this call and build partnerships so that all children have the same opportunity to achieve their full development potential, no matter their sex or where they were born. This is essential if we are to guarantee that our children not only survive but also thrive.

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We declare no competing interests.

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- 1 Countdown to 2015. Countdown to 2015 decade report (2000–2010): taking stock of maternal, newborn and child survival. New York: UNICEF, 2010.
- 2 UN. Transforming our world: the 2030 agenda for sustainable development. 2015. http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E (accessed Oct 10, 2016).
- 3 Lu C, Black MM, Richter LM. Risk of poor development in young children in low-income and middle-income countries: an estimation and analysis at the global, regional, and country level. *Lancet Glob Health* 2016; published online Oct 4. [http://dx.doi.org/10.1016/S2214-109X\(16\)30266-2](http://dx.doi.org/10.1016/S2214-109X(16)30266-2).
- 4 Grantham-McGregor S, Cheung YB, Cueto S, Glewwe P, Richter L, Strupp B. Developmental potential in the first 5 years for children in developing countries. *Lancet* 2007; **369**: 60–70.
- 5 Black MM, Walker SP, Fernald LCH, et al. Early childhood development coming of age: science through the life course. *Lancet* 2016; published online Oct 4. [http://dx.doi.org/10.1016/S0140-6736\(16\)31389-7](http://dx.doi.org/10.1016/S0140-6736(16)31389-7).
- 6 Barros AJD, Matijasevich A, Santos IS, Halpern R. Child development in a birth cohort: effect of child stimulation is stronger in less educated mothers. *Int J Epidemiol* 2010; **39**: 285–94.
- 7 Camargo-Figuera FA, Barros AJ, Santos IS, Matijasevich A, Barros FC. Early life determinants of low IQ at age 6 in children from the 2004 Pelotas Birth Cohort: a predictive approach. *BMC Pediatr* 2014; **14**: 308.
- 8 McCoy DC, Peet ED, Ezzati M, et al. Early Childhood Developmental Status in Low- and Middle-Income Countries: National, Regional, and Global Prevalence Estimates Using Predictive Modeling. *PLoS Med* 2016; **13**: e1002034.
- 9 Britto PR, Lye SJ, Proulx K, et al. Nurturing care: promoting early childhood development. *Lancet* 2016; published online Oct 4. [http://dx.doi.org/10.1016/S0140-6736\(16\)31390-3](http://dx.doi.org/10.1016/S0140-6736(16)31390-3).
- 10 Richter LM, Daelmans B, Lombardi J, et al. Investing in the foundation of sustainable development: pathways to scale up for early childhood development. *Lancet* 2016; published online Oct 4. [http://dx.doi.org/10.1016/S0140-6736\(16\)31698-1](http://dx.doi.org/10.1016/S0140-6736(16)31698-1).