The decline in child malnutrition in Brazil

In recent years, Brazil has experienced one of the most impressive declines in child malnutrition anywhere in the developing world. According to a comparison of estimates from the *Demographic Health Surveys* program in probabilistic samples of Brazilian children under five years of age in 1996 and 2006-2007, severe forms of malnutrition, as indicated by a sharp disproportion between weight and height, were virtually eliminated throughout the country, including the Northeast Region, where previously there was still a relevant prevalence of such types of malnutrition. During the same period, the national prevalence of height-for-age deficit, a sensitive indicator of the persistent presence of poor nutritional and health conditions, was reduced from 13.5% to 6.8%. In the Northeast, stunting decreased from 22.2% to 5,9%, totally erasing this region's disadvantage in relation to the Central and Southern Regions of the country. The sharp drop in stunting among the lowest-income quintile of children and a slight reduction among the highest-income quintile eliminate three-fourths of the absolute disparity between extreme poverty and extreme wealth (from 24.6 to 6.2 percentage points).

Based on statistical modeling applied to the data sets from the two surveys, the favorable evolution in four determinants of child nutrition explains two-thirds of the drop in malnutrition [Monteiro et al. Rev Saúde Pública 2009; 43(1):35-43]. The improvement in maternal schooling, especially doubling the proportion of mothers that finished primary school, explains 25.7% of the decline in the prevalence of childhood stunting. Another 21.7% can be attributed to increased purchasing power among the poorest Brazilian families, as reflected in the substantial shift from socioeconomic class E to classes D and C. Another 11.6% of the decline can be attributed to the expansion of primary health care for mothers and children, and another 4.3% to the growth in coverage of sanitation services. In short, the causes of the impressive decline in child malnutrition in Brazil appear to lie in the improvements in coverage of essential public services and increases in family income, both particularly favoring the poor.

Improvements in maternal schooling reflect expanded access by young people to primary education in the last 10 to 20 years. Meanwhile, improved maternal and child health care and sanitation represent continuous expansions in access to these services from 1996 to 2007. More recently there has been an important increase in purchasing power among the poorest Brazilians, resulting from an upturn in the national economy, a reduction in unemployment, and policies focused on increasing the income of the lowest income segments, particularly the increase in the minimum wage and expansion and intensification of income transfer programs [Neri MC, coord. *Miséria, Desigualdade e Políticas de Renda: O Real do Lula.* Rio de Janeiro: FGV/IBRE/CPS; 2007].

The most important issue is that overcoming the blight of child malnutrition once and for all, as glimpsed in the last decade, will depend on maintaining economic growth and income redistribution policies, as well as investments to universalize such policies (still incomplete), with access by all Brazilian families to education, health, and sanitation.

The Brazilian experience in the last decade demonstrates the enormous impact on child malnutrition resulting from policies for income redistribution and universal access to education, health, and sanitation. Such policies should top the agenda of priorities for any government committed to improving quality of life for future generations.