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**Timeline**

2021

**Sample Size**

4,000 caregivers of children under one year of age and 4,000 program staff (educadoras)

**Research Implemented by IPA**

Yes

# Improving Early Childhood Development in Ecuador

## Abstract

Stunted growth in childhood can have long-term effects on cognitive development, school achievement, economic productivity in adulthood, among others. Addressing this in the early years has proved to be the best way to combat undernutrition, but families often lack adequate information about good feeding practices. In Ecuador, researchers are evaluating whether sending information to caregivers via text message increases knowledge about early childhood development, nutrition, and healthy behaviors.

## Policy Issue

Although the percentage of malnourished children has decreased, worldwide more than one in five children under five still has stunted growth.<sup>[1]</sup> Furthermore, nearly half of all deaths in children under five are due to undernutrition. Studies indicate that undernutrition is associated with poor cognition and educational performance, low adult wages, loss of productivity and an increased risk of nutrition-related chronic diseases in adult life.<sup>[2]</sup>

Evidence suggests<sup>[3]</sup> families may be unaware of their child's undernutrition and often lack information about good feeding practices that are indispensable for adequate nutrition in the first years of children's lives. Therefore, some interventions have focused on sharing health and nutritional information. A randomized evaluation in a province in Ecuador found that text messages may be effective for communicating this information. However, more evidence is needed to generalize these findings.

## Context of the Evaluation

In Ecuador, 24 percent of children under the age of five are stunted<sup>[4]</sup> and preventing this in the early years is critical for child development.<sup>[5]</sup> The Government of Ecuador — through the Ministry of Economic and Social Inclusion — is seeking to improve child nutrition during the first 1,000 days of life by revamping existing nationwide programs that include home visits (CNH), public early child development centers (CDI), and group meetings with caregivers of young children (CCRA). In each of these programs, program staff (“educadoras”) discuss prenatal care, healthy nutrition, breastfeeding, and hygiene. Due to COVID-19, these services are being provided virtually.

## Details of the Intervention

Researchers are evaluating whether sending information via text message increases caregivers' knowledge about early childhood development, nutrition, and healthy behaviors. They will also evaluate whether text messages can improve the quality of the services educadoras provide. Four-thousand caregivers within a national early childhood development program (CNH/CDI/CCRA) with children between 0-12 months of age will be randomly assigned into two groups.

- Text messages group: Half of the caregivers will receive weekly age-specific information via text messages on child health and nutrition.
- Comparison group: Half of the caregivers will not receive any text messages.

In addition, 4,000 educadoras will be randomly assigned to receive text messages with information, reminders and motivational content to implement high quality service provision or not to receive text messages. The text messages will be sent twice a week directly through the ministry's SMS platform.

Researchers will conduct phone surveys with caregivers to measure their knowledge about child health and nutrition. They will also use anonymized administrative data (including program staff training data, staff tests, number of services provided) to assess the impact of text messages on the quality of services provided.

## Results and Policy Lessons

Project ongoing; results forthcoming.

## Sources

<sup>[1]</sup> UNICEF. “Malnutrition in Children.” UNICEF DATA. Accessed April 7, 2021.  
<https://data.unicef.org/topic/nutrition/malnutrition/>.

<sup>[2]</sup> World Health Organization (WHO). "Stunting in a Nutshell." Accessed April 7, 2021.  
<https://www.who.int/news/item/19-11-2015-stunting-in-a-nutshell>.

<sup>[3]</sup> Orozco, Fadya, Diana Ochoa, Maria Muquinche, Manuel Padro, and Christopher L. Melby. "Awareness, Comprehension, and Use of Newly-Mandated Nutrition Labels Among Mestiza and Indigenous Ecuadorian Women in the Central Andes Region of Ecuador." *Food and Nutrition Bulletin* 38, no. 1 (March 2017): 37–48. <https://doi.org/10.1177/0379572116684730>.

<sup>[4]</sup> The World Bank. "Prevalence of Stunting, Height for Age (% of Children under 5) - Ecuador | Data." DataBank. Accessed April 6, 2021.  
<https://data.worldbank.org/indicator/SH.STA.STNT.ZS?locations=EC>.

<sup>[5]</sup> The World Bank. "Prevalence of Stunting, Height for Age (% of Children under 5) - Ecuador | Data." DataBank. Accessed April 6, 2021.  
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