



A broad range of positive impacts have been documented for cash transfers. However, the evidence on effects on child nutrition is mixed.

This research brief provides a summary of the impacts of Zambia's Child Grant Program (CGP) on child chronic malnutrition over four years.

Results show no observable impact on height-for age or the incidence of stunting. Though the CGP significantly improved overall food consumption, diet quality and meal frequency, these effects were not large enough to compensate for the poor health infrastructure, harsh disease environment and low knowledge of caregivers about health and feeding practices.

In extremely poor settings, cash transfers may need to be accompanied by complementary interventions to have an impact on long-term chronic malnutrition.

Several recent articles have reviewed the existing state of evidence on the effects of cash transfers on child nutritional status and found mixed results.<sup>1</sup> Notwithstanding the common publication bias towards significant impacts, one meta-analysis merely points to a slightly positive but not statistically significant effect of cash transfers on child height-for-age, a well-established indicator for chronic malnutrition.<sup>2</sup> Another review, with a focus on sub-Saharan Africa, summarizes the evidence on the effects of cash transfers on child nutrition and on the potential pathways through which cash could affect nutritional status: the environment, food intake and health behaviours.<sup>3</sup> This investigation confirms the lack of systematic positive impacts on child nutritional status, but does highlight positive effects on intermediate outcomes such as food security and the use of health services. Overall, these reviews point to the relative dearth of evidence on the effects of cash on potential transmission channels.

This brief summarizes new evidence on the impacts of a government-run unconditional cash transfer on chronic malnutrition and intermediate outcomes for young children (aged 0-36 months at programme initiation) in Zambia.

### THE CHILD GRANT PROGRAMME

The Zambian Child Grant Programme (CGP) is a government-run unconditional cash transfer targeted to households with young children in extremely poor and remote rural areas (see Table 1). The main aim of the programme is poverty reduction; improving child health and nutrition is another primary objective. Cash transfers are provided to the primary female caregiver of the child/ren once every two months and represent a 27 percent increase in pre-program consumption.

The CGP is a stand-alone cash transfer meaning there are no additional components/services provided beyond cash, and there are no conditions for beneficiaries to comply with to receive the cash.

Existing evidence on the CGP points to positive impacts both on protective outcomes – such as food security, consumption, and child material needs – and productive ones – such as livestock accumulation, productive investments and savings.<sup>4</sup>



## STUDY DESIGN AND DATA

The evaluation was designed as a longitudinal cluster-randomized controlled trial (cRCTs) in three rural districts of Zambia (see Table 1). Ninety communities were either assigned to a treatment or a control group. Data were collected first at baseline and then at several follow-ups over 48-months. The sample comprised 2,519 households.

To estimate the causal impacts of the programme on stunting and height-for-age as well as on several plausible nutritional inputs, we run difference in differences (DiD) models.

The main sample for the analysis includes children who were aged 0–36 months at baseline and were measured for height at this time (N=2,464). We are thus able to investigate programme impacts on our primary outcomes during the crucial early years of life.

## FINDINGS

### *Programme impacts on child height*

At baseline, almost a third of children in our sample are stunted. After four years of implementation, the CGP had no effects on child height – whether measured as height-for-age or stunting (see Table 2).

Results are robust also when focusing on two subsamples that could be expected to benefit most from the transfers: children born at the start of the programme (who received transfers continuously for much of the vital first 1,000 days of life) and those born into the programme (who might have benefited from improved maternal nutrition during the in utero period and from increased food consumption early in life).

### *Programme impacts on nutritional inputs*

We explore programme impacts on three main pathways through which cash transfers could potentially influence the nutrition outcomes of interest: the disease environment, food security and health behaviours.

The cash transfer scheme had large positive effects on the food security pathway. Programme children reside in households that spend 16 to 28 percent more on food per capita than control counterparts. The likelihood of having three or more meals was significantly more prevalent among children in the CGP programme, with an impact ranging between 19 and 32 percentage points depending on the wave. Further, positive effects are recorded also on some diet diversity-related outcomes: treatment group children consume more protein-rich food and dairy products than their control group peers (10-13 percentage points impact at 48-months).

However, there were no impacts on health inputs such as morbidity, and mixed impacts on environmental inputs such as water and sanitation (see overview of results in Table 2).

## DISCUSSION AND IMPLICATIONS FOR POLICY MAKING

The evidence from the CGP is consistent with the previous reviews on the effects of cash transfers on child nutrition.<sup>5</sup> Still, the lack of impact on child height may seem somewhat puzzling given that the programme positively affected a number of seemingly important nutritional inputs.

Why did the programme have no impact on child height and stunting? It is possible that the realised impacts on some nutritional inputs were not large enough, or that it might be necessary to bring about improvements across all vital pathways (the environment, food intake and health behaviours) to affect nutritional outcomes. The determinants of nutrition are complex, and go beyond food to include caring practices and the disease environment. Two key complementary inputs, nutrition knowledge and health infrastructure, are very low in the study setting, and may further explain why this demand-side intervention did not have impacts.

We conclude that in extremely poor settings, like the one covered by the study, cash alone may not be enough to address long-term chronic malnutrition. Synergistic impacts might be best achieved by combining cash transfers with complementary interventions, such as the provision of information and the improvement in access to and/or the quality of supply-side services (i.e. ‘cash plus’ initiatives or integrated social cash transfer programming).

---

**Written by Averi Chakrabarti\*, Sudhanshu Handa\*\* and Luisa Natali \*\*\***

\*Postdoctoral Fellow at Department of Global Health and Population, T.H. Chan School of Public Health, Harvard University

\*\*Professor, Department of Public Policy, University of North Carolina at Chapel Hill

\*\*\*Social Policy Specialist, UNICEF Office of Research – Innocenti

*For additional information, please see:* Chakrabarti, A., Handa, S., Natali, L., Seidenfeld, D. and Tembo, G. 2020. [“More evidence on the relationship between cash transfers and child height”](#).

*Journal of Development Effectiveness*, 12(1), 14-37.

doi:10.1080/19439342.2020.1731568

<sup>1</sup>Manley, J., and Slavchevska, V. 2017. “Are Cash Transfers the Answer for Child Nutrition in Sub-Saharan Africa? A Literature Review.” *Development Policy Review* 37 (2), 204–224. <sup>2</sup>Owusu-Addo, E., Renzaho, A. M. and Smith, B. J. 2018. “The Impact of Cash Transfers on Social Determinants of Health and Health Inequalities in sub-Saharan Africa: A Systematic Review.” *Health Policy and Planning* 33 (5): 675–696. <sup>3</sup>Manley, J., Gitter, S. and Slavchevska, V. 2013. “How effective are cash transfers at improving nutritional status?” *World Development*, 48, pp.133-155. <sup>4</sup>de Groot, R., Palermo, T., Handa, S., Ragno, L. P. and Peterman, A. 2017. “Cash Transfers and Child Nutrition: Pathways and Impacts.” *Development Policy Review* 35 (5): 621–643. <sup>5</sup>Handa, S., Seidenfeld, D., Davis, B. and Tembo, G. 2016. “The Social and Productive Impacts of Zambia’s Child Grant.” *Journal of Policy Analysis and Management* 35 (2): 357–387. Handa, S., Natali, L., Seidenfeld, D., Tembo, G. and Davis, B. 2018. “Can Unconditional Cash Transfers Raise Long-term Living Standards? Evidence from Zambia.” *Journal of Development Economics* 133: 42–65. <sup>6</sup>Such as Manley, Gitter, and Slavchevska (2013) and de Groot et al. (2017).



Table 1. Main features of the Zambia's Child Grant Programme and its evaluation

Intervention	Unconditional cash transfer.
Overall goal	To reduce extreme poverty and the intergenerational transfer of poverty.
Targeting	Households who have children under the age of five. <sup>1</sup>
Transfer size	55 Kwacha <sup>2</sup> (ZMW) a month (equivalent to approximately U.S. \$12, ~27% of pre-program consumption) irrespective of household size, paid bi-monthly.
Evaluation timeline	2010-2014 (baseline and 4 follow-ups over 48 months).
Location (stratification)	Three rural districts: Kalabo, Shangombo and Kaputa.
Evaluation design	Cluster Randomized-controlled trial (cRCT); 90 communities (30 per each district; 45 assigned to the treatment arm through public lottery).
Household sample size	2,519.

<sup>1</sup> In the evaluation, the eligibility criteria at entry point was whether a household had a child below 3 years old so that study sample households could benefit from the cash transfer for at least two years.

<sup>2</sup> The benefit was adjusted over time to keep up with inflation.

Table 2. Overview of CGP impacts on chronic child malnutrition and potential pathways

	24-month	36-month	48-month
<b>Chronic malnutrition</b>			
Height-for-age z-score (HAZ)	NS	NS	NS
Stunting	NS	NS	NS
<b>Plausible mechanisms</b>			
<b>Environmental inputs</b>			
Household has access to toilet facilities	n/a	+	NS
Household uses clean water source	n/a	+	NS
Roof of dwelling made of purchased material	n/a	NS	NS
Floor of dwelling made of purchased material	n/a	+	NS
Wall of dwelling made of purchased material	n/a	NS	NS
<b>Food inputs</b>			
Child meal frequency (three or more) [ <i>19-32 percentage points</i> ]	+	+	+
Household food expenditure per capita [ <i>16-28 percent</i> ]	+	+	+
Child consumed food from four or more food groups	n/a	n/a	NS
Child consumed protein rich foods [ <i>13 percentage points</i> ]	n/a	n/a	+
Child consumed dairy products [ <i>10 percentage points</i> ]	n/a	n/a	+
<b>Health inputs and behaviour</b>			
Household owns a mosquito net	NS	NS	NS
Child sick during last two weeks	NS	NS	NS
Child has health card	NS	NS	NS
Child taken to well-baby or under-five clinic in last six months	NS	NS	+
Child received vitamin A dose	NS	n/a	n/a
Child received one BCG, three Polio, three DPT and one measles vaccines	NS	n/a	n/a

Green cells indicate impacts are positive and statistically significant at the 5% level; 'n/a' indicates data is not available (i.e. not collected);

'NS' indicates impact estimates are not statistically significant at the 5 percent level.

For significant impact estimates, namely food inputs, we report the magnitude range of impacts in *italics* and in [squared brackets].

The Transfer Project is a multi-organizational initiative of UNICEF, the UN Food and Agriculture Organization (FAO), and the University of North Carolina at Chapel Hill in collaboration with national governments, and other national and international researchers. For a full list of partners and funders for the Zambia impact evaluations see: <https://transfer.cpc.unc.edu/countries-2/zambia/>