

Maternal Cash Transfers and Child Nutrition: Evidence from India

Vedavati Patwardhan

Evans School of Public Policy & Governance

Research Question: To what extent does a non means-tested cash transfer targeted to pregnant and nursing mothers affect children's nutrition?

Contributions

- Impact of a non means-tested CT on child wellbeing
- Impact of CTs on child nutrition in the populous Indian context
- Disaggregated program effects
 - By child gender - documented son preference in India

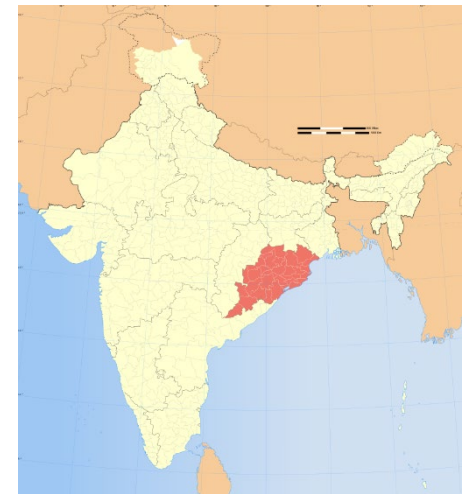


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The Mamata Scheme

- Launched Sept. 2011, 2.5 million beneficiaries at time of the study
- Exogenous source of variation for quasi-experiment (program eligibility)
 - Mother's age > 19 years
 - Child's birth order ≤ 2
- Difference-in-differences using NFHS survey data
 - Treatment Group: Odisha
 - Comparison Group: West Bengal
- Results: WHZ \uparrow HAZ \uparrow



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Motivation

- Early-life circumstances shape a child's future health (Currie & Almond, 2011). Nutritional deficits in **early life** have adverse effects on adult outcomes (Victora et al., 2008).
- Early-life interventions are important to tackle future **gaps** in human capital outcomes (Hoddinott et al., 2008)
- Globally, many **cash transfer (CT)** programs, both conditional and unconditional, are means-tested, and target female beneficiaries and/or households with children under 5 years. Fewer specifically target pregnant and nursing mothers.
- More research is needed to examine the effect of **non means-tested CTs** with **narrower targeting** on child well-being.
- Examine the effect of an Indian maternal cash transfer program "**Mamata Scheme**" in the state of Odisha on child nutrition.
- Child undernutrition is a large global problem, and **India** bears a large share of the burden, despite rapid economic growth, "a puzzle" (NFHS 2015-16).

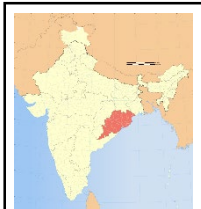


Figure 1: Odisha State (red) in India

Research Question

To what extent do cash transfers targeted at pregnant and lactating women affect children's nutrition?

Data

- Two rounds of the **India National Family Health Survey (NFHS)**, collected in 2005-6 and 2015-16 (n=8726). NFHS is a nationally representative repeated cross-sectional survey conducted in five waves from 1992-2019.
- Odisha Sample: 4540 women aged 15-49 in Wave 3; 33,271 women in Wave 4.
- Survey has household, man's and woman's questionnaires. Includes **height and weight measurements** for all children under 5, wealth index classification.
- Sample restricted to **households with children under 5** present in both survey waves.

Methods

Difference-in-Differences Regression Model

$$Y_{ijt} = \beta_0 + \beta_1 (Eligible * 2015)_{jt} + \beta_2 (Eligible)_{jt} + \beta_3 (2015) + \gamma X_{ijt} + \eta_i + \varepsilon_{ijt}$$

Covariates include household, mother and child-level characteristics. Regression includes birth month and year FE and a control for wealth trends.

Regression Results

	WHZ (weight-for-height z-score)		HAZ (height-for-age z-score)	
	Model 1	Model 2	Model 1	Model 2
Eligible x Post	1.03*** (0.16)	1.13*** (0.20)	0.92*** (0.20)	0.93*** (0.23)
Poor x Eligible x Post		-0.15 (0.17)		-0.03 (0.19)
N	7,412	7,412	7,412	7,412
R ²	0.11	0.11	0.20	0.20

Standard errors in parentheses clustered around child birth order
*** p<0.01, ** p<0.05, * p<0.1

Summary of Findings

- Being eligible for a maternal cash transfer is associated with higher weight-for-height (**lower wasting**) and height-for-age (**lower stunting**) in Indian households.
- **Difference-in-differences regression model** (Intent-to-treat analysis) finds that being eligible for Mamata benefits improves a child's **weight-for-height** (lower wasting) and **height-for-age** (lower stunting).
- Heterogenous effects by **hh. wealth and location (rural/urban)** and **child gender** for wasting.

Discussion

- **Non means-tested cash transfers** could be very valuable to reduce stunting and wasting in India.
- **Girls** have lower WHZ than boys; potentially due to son preference
- Nationwide rollout of a similar CCT program starting in 2017 (Shukla & Kapur, 2019).

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