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# The Impact of Maternal and Child Cash Transfers on Malnutrition

Evidence from the Randomized Controlled Trial of LEGACY Program (Dry Zone)

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# Background

**Myanmar** has one of the highest stunting rate in South East Asia

**29%** of children are stunted (DHS, 2015)

Women lack:

1. Purchasing power
2. Knowledge on practices



# Solution: Maternal and Child Cash Transfers (MCCT)

**Focus:** 1,000 days of life – pregnant mothers and their children under two years old.

1. Cash transfers
2. Social Behavioral Change Communication (SBCC)

**Research:** we measured impact of MCCT on health outcomes

Comparison

Cash  
transfers  
only

Cash transfers +  
Social Behavioral Change  
Communication



# Project Information

- **Timeline:** 2016-2019
- **Researchers:** Elisa Maffioli (University of Michigan), Erica Field (Duke University)
- **Partners:**



# The LEGACY Program (Dry Zone)

## Background

- **LEGACY: Learning, Evidence Generation, and Advocacy for Catalyzing Policy**
- Implemented by Save the Children
- Launched in April 2016
- Location: Pakokku, Yesagyo, Mahlaing Townships in the Dry Zone
- **Eligible beneficiaries:** pregnant women in 2<sup>nd</sup> or 3<sup>rd</sup> trimester living in selected villages



# The LEGACY Program (Dry Zone)

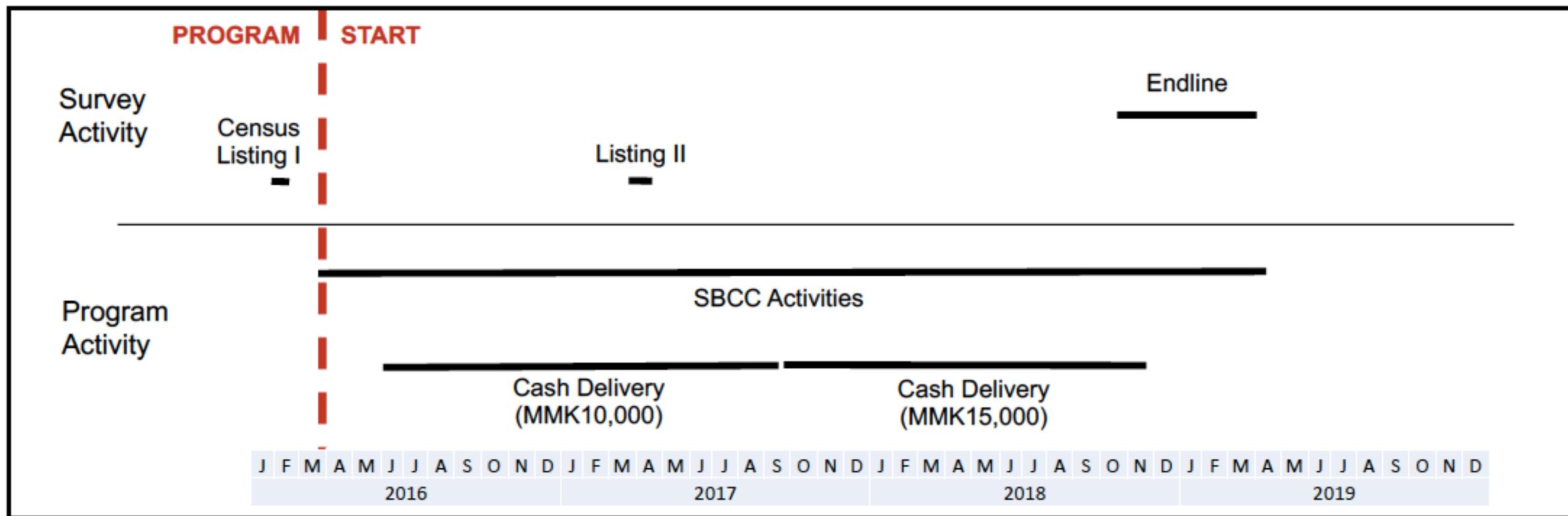
## Main elements

1. Monthly **Cash Transfers** to mothers in their last two trimesters of pregnancy until the child turns two years old (“first 1000 days”)
  - **Pact Global Microfinance (PGMF)** delivered 10,000-15,000 MMK monthly
2. Monthly **Social and Behavioral Change Communication (SBCC)**, supplementing the cash transfers, covering topics including: IYCF, WASH, health care behavior and expenditures.
  - **Myanmar Nurses and Midwives Association (MNMA)** enrolled beneficiaries and delivered SBCC: mother groups, influential caregiver groups, individual counselling



# The LEGACY Program (Dry Zone)

## Timeline



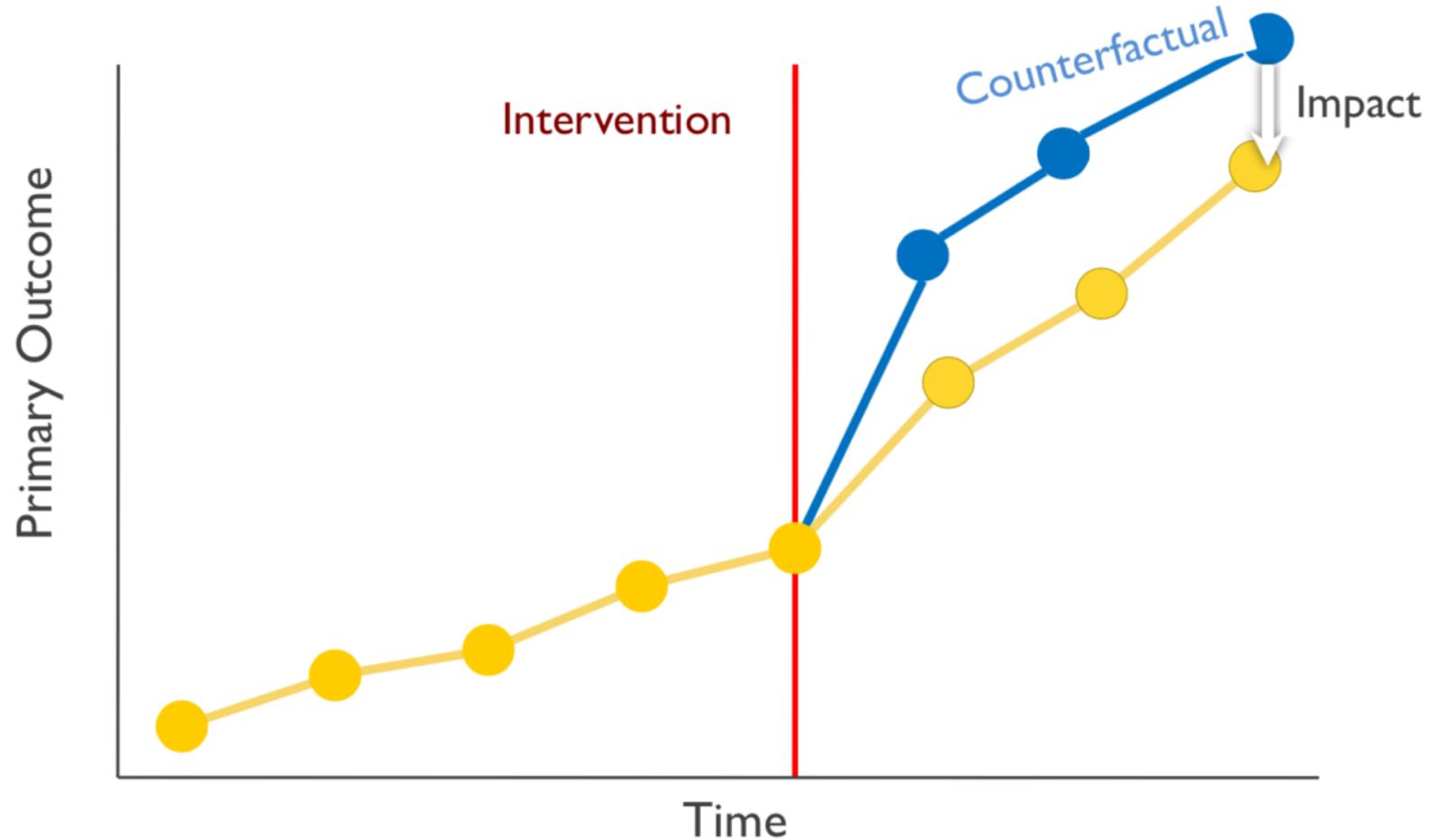


# Evaluating the LEGACY Program (Dry Zone)

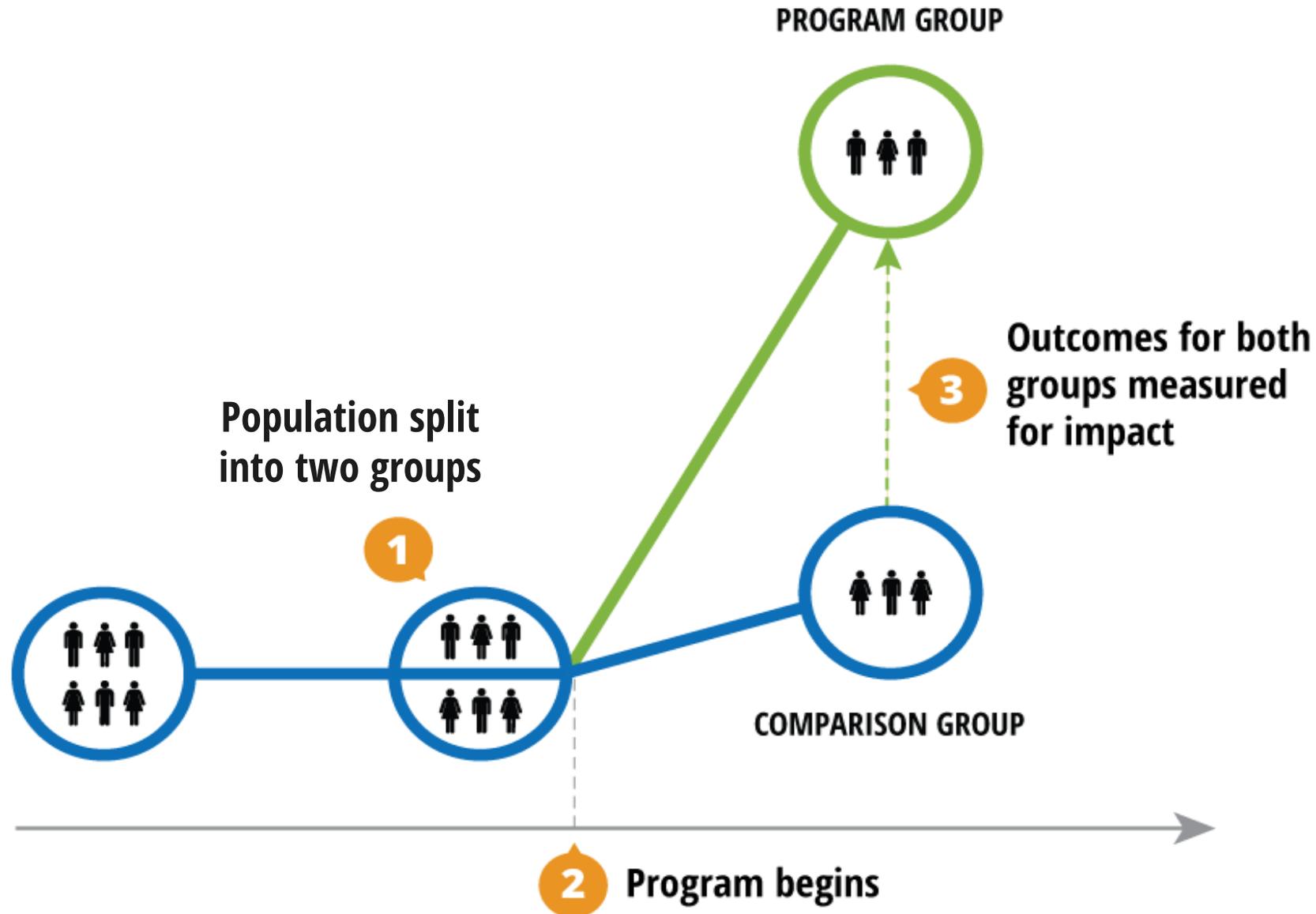
# The idea of the counterfactual illustrated

Before and After Comparison

Proportion of  
children  
well-nourished

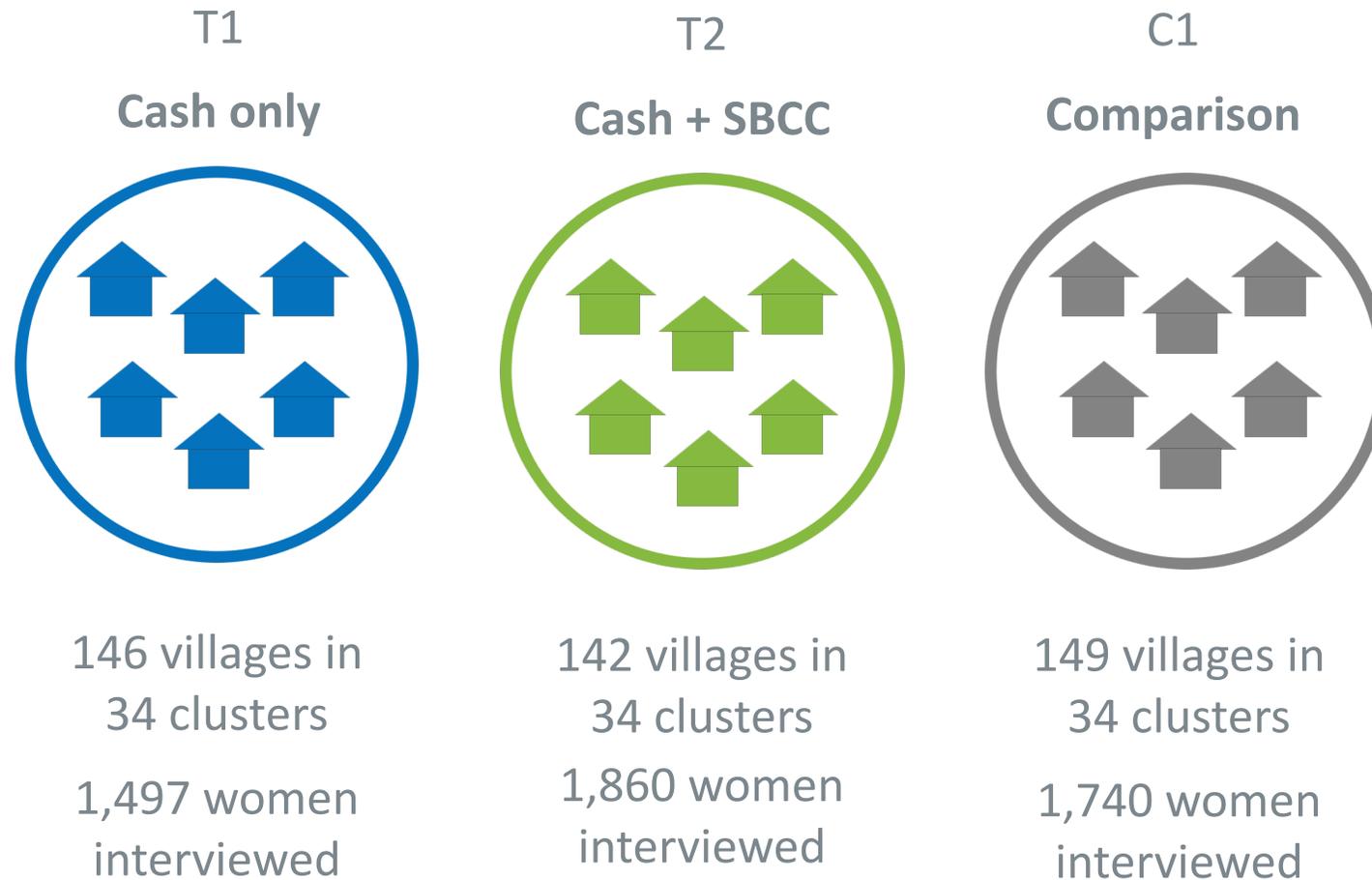


# The idea of the counterfactual illustrated



# Evaluating the LEGACY Program (Dry Zone)

## Study design



**Total sample: 5,097 women at Endline**



# Studying LEGACY with a Randomized Evaluation (Dry Zone)

## Outcomes

- Anthropometric measures: stunting
- Dietary diversity
- Antenatal care (ANC) practices
- Infant and young child feeding (IYCF) practices
- WASH measures
- Other health and economic indicators



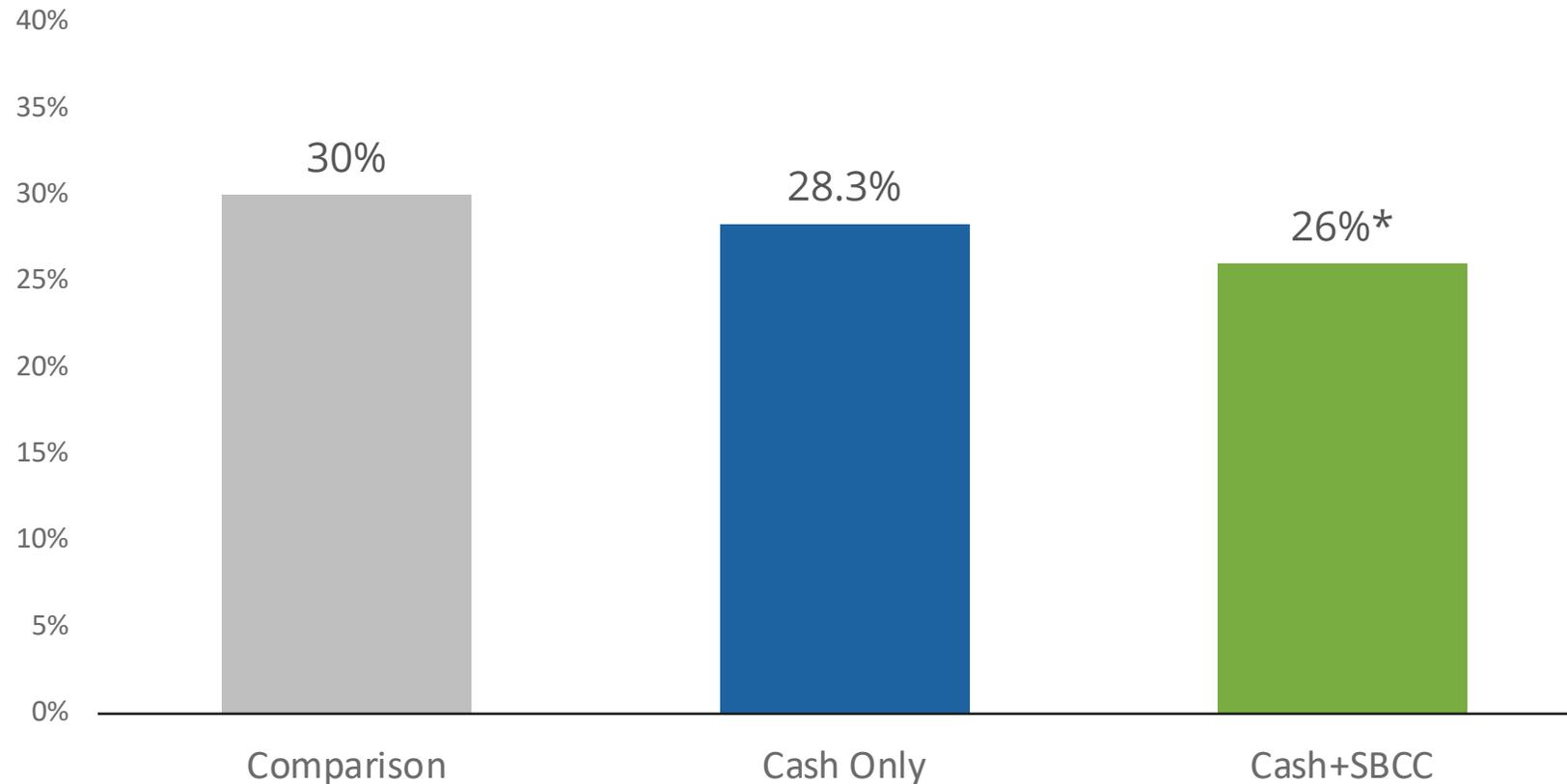


# Results

# Cash+SBCC Reduced Proportion of Children Stunted

No significant impacts for Cash-Only

## Proportion of Children Stunted (6-29 months old)



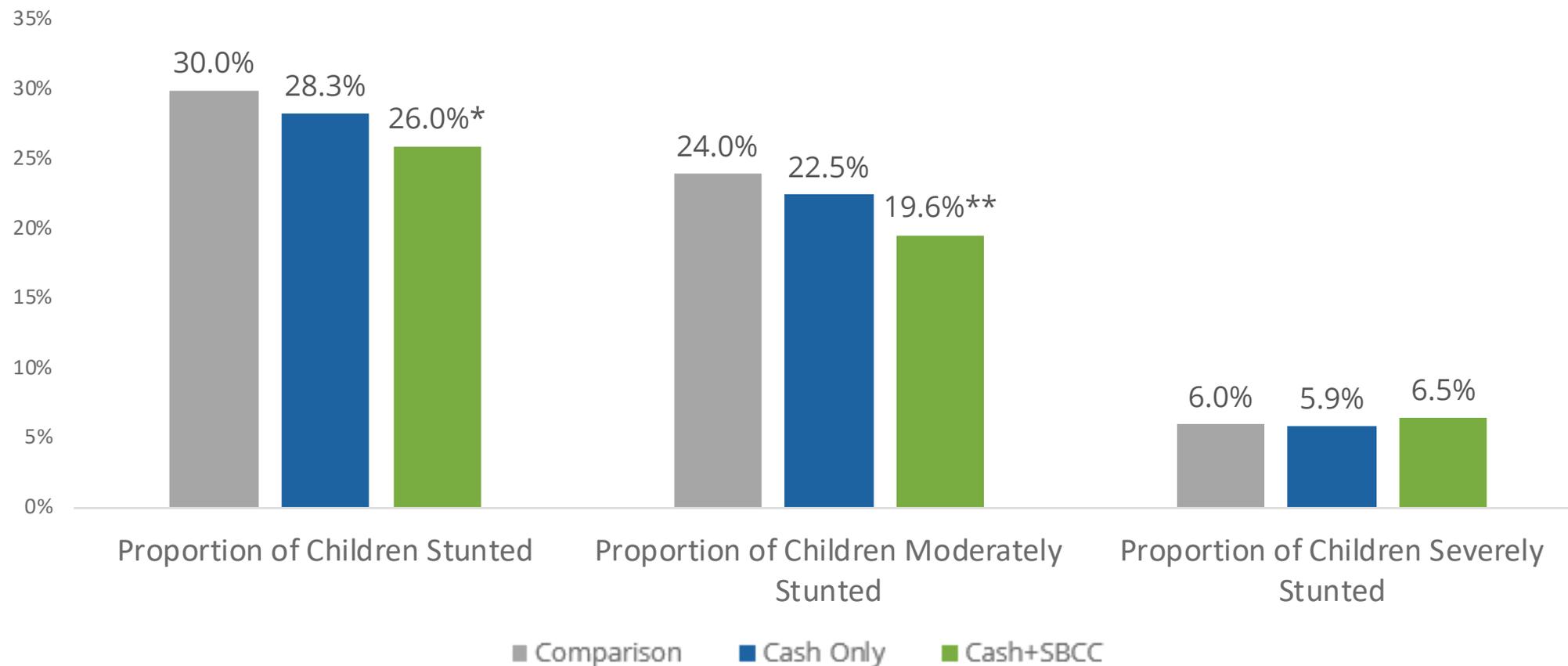
\*\*\* statistically significant at 1%; \*\* statistically significant at 5%; \* statistically significant at 10%



# Cash+SBCC Reduced Proportion of Children Stunted

Impacts driven by moderately stunted children

## Proportion of Children Stunted



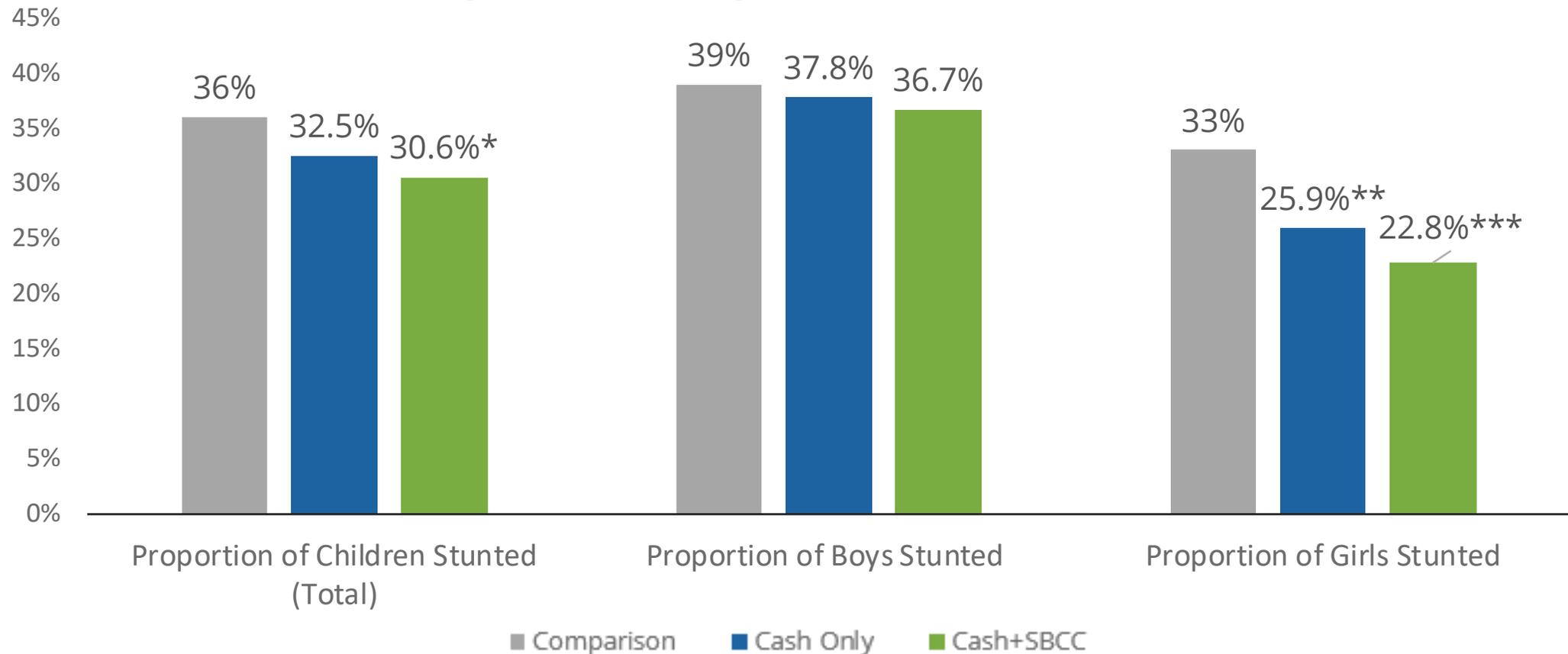
\*\*\* statistically significant at 1%; \*\* statistically significant at 5%; \* statistically significant at 10%



# Large Impacts For Families Receiving Program Longest

Gender differences are not robust

## Proportion of Children Stunted Whose Families Received Program the Longest (24-29 months old)



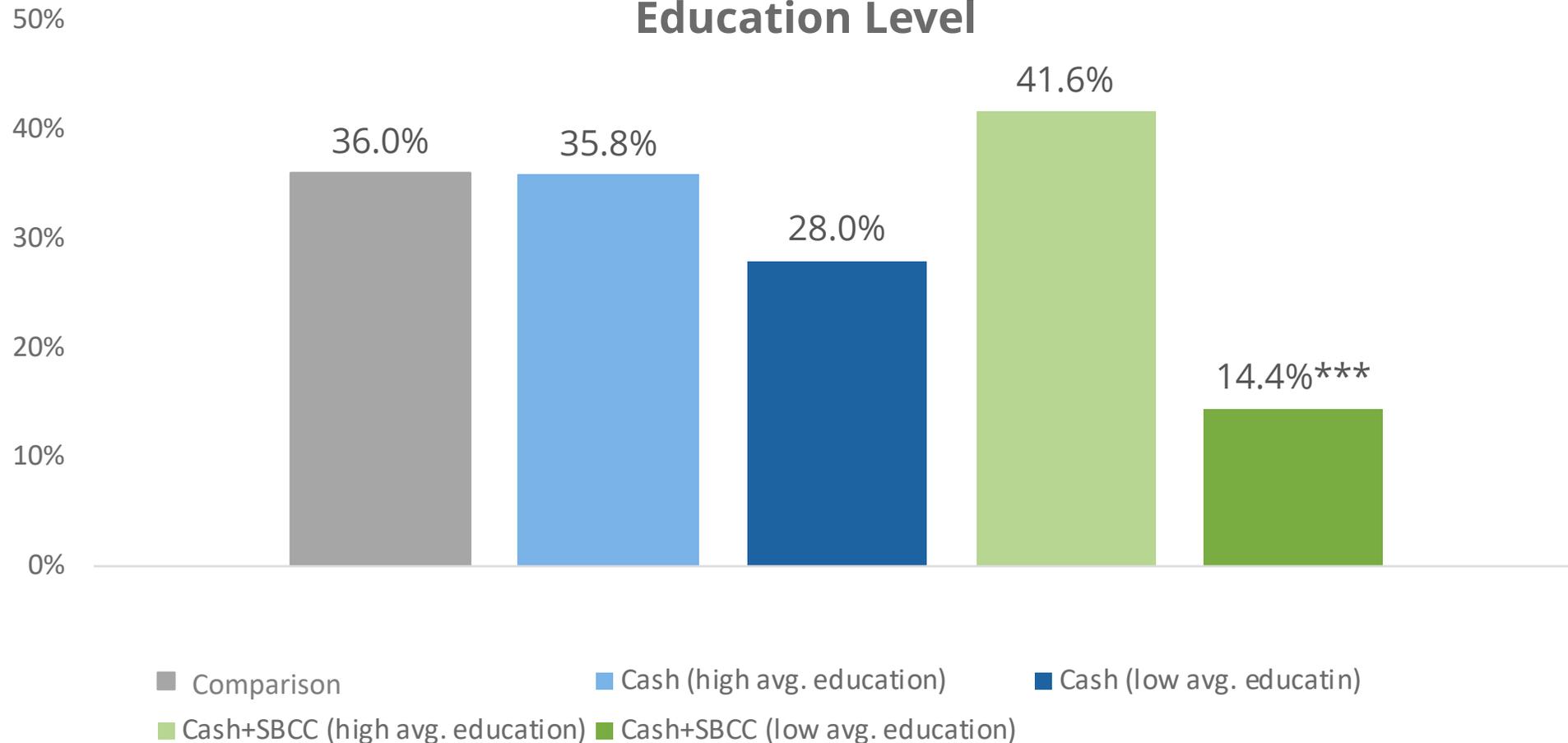
\*\*\* statistically significant at 1%; \*\* statistically significant at 5%; \* statistically significant at 10%



# Cash+SBCC Effects Larger For Villages with Lower Average Education

Women's level of education at village level

## Proportion of Children Stunted By Village's Average Education Level



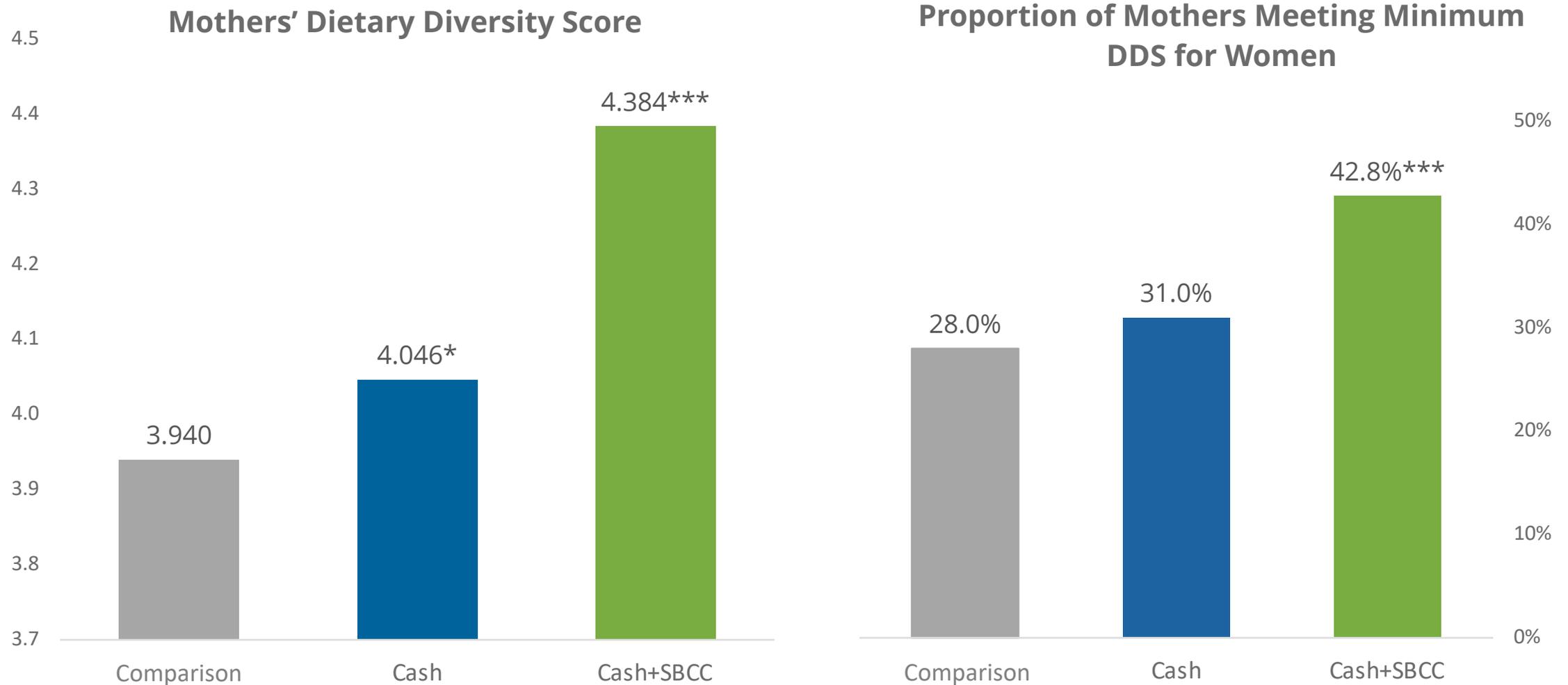
# Mechanisms

Which factors do explain these changes?

- Dietary diversity
- Antenatal care (ANC) practices
- Infant and young child feeding (IYCF) practices
- WASH measures
- Other health and economic indicators



# Cash+SBCC Increased Mothers' Dietary Diversity

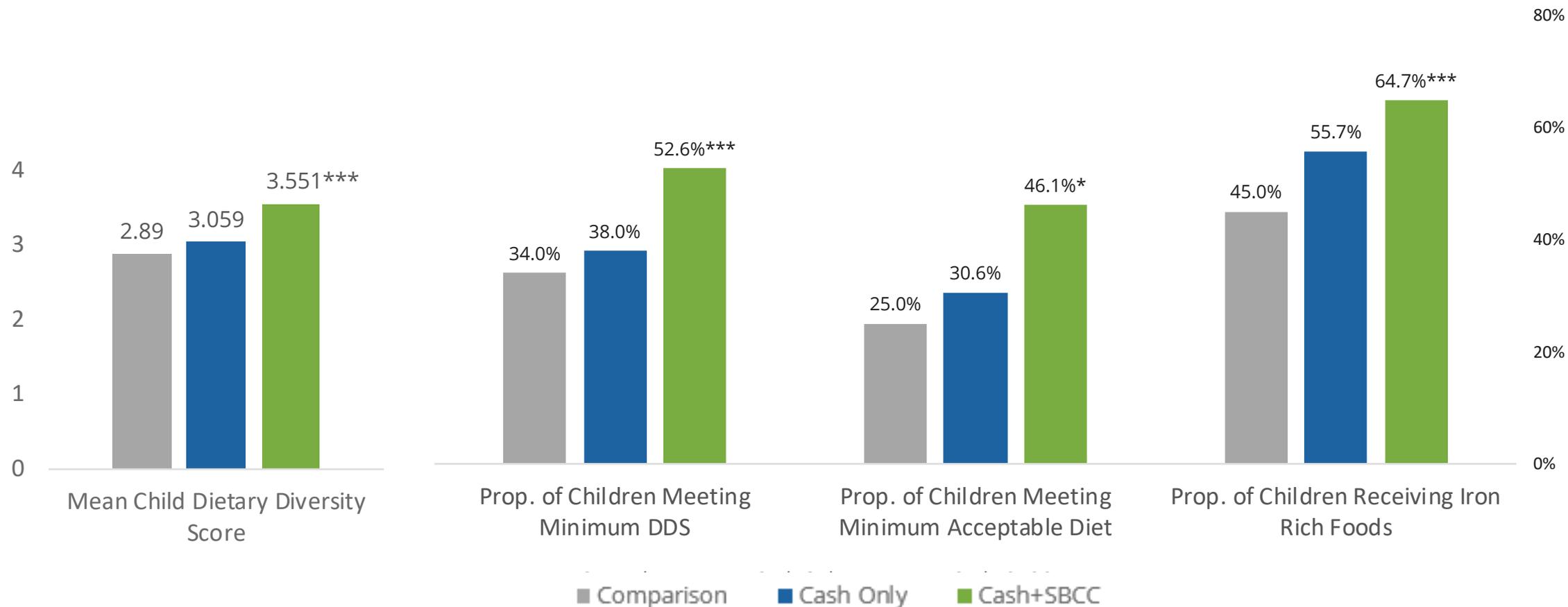


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# Cash+SBCC Improved Children's Dietary Diversity

## Child Dietary Diversity

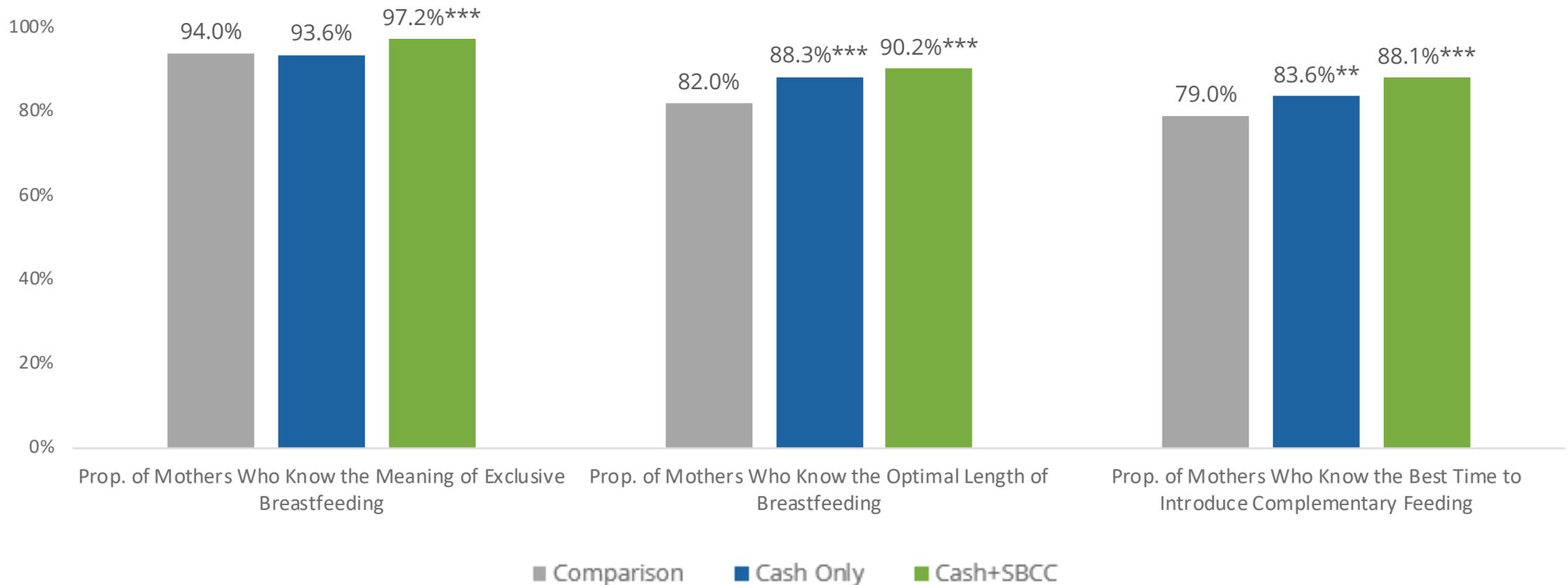


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# Cash+SBCC Increased Mothers' Knowledge of Breastfeeding

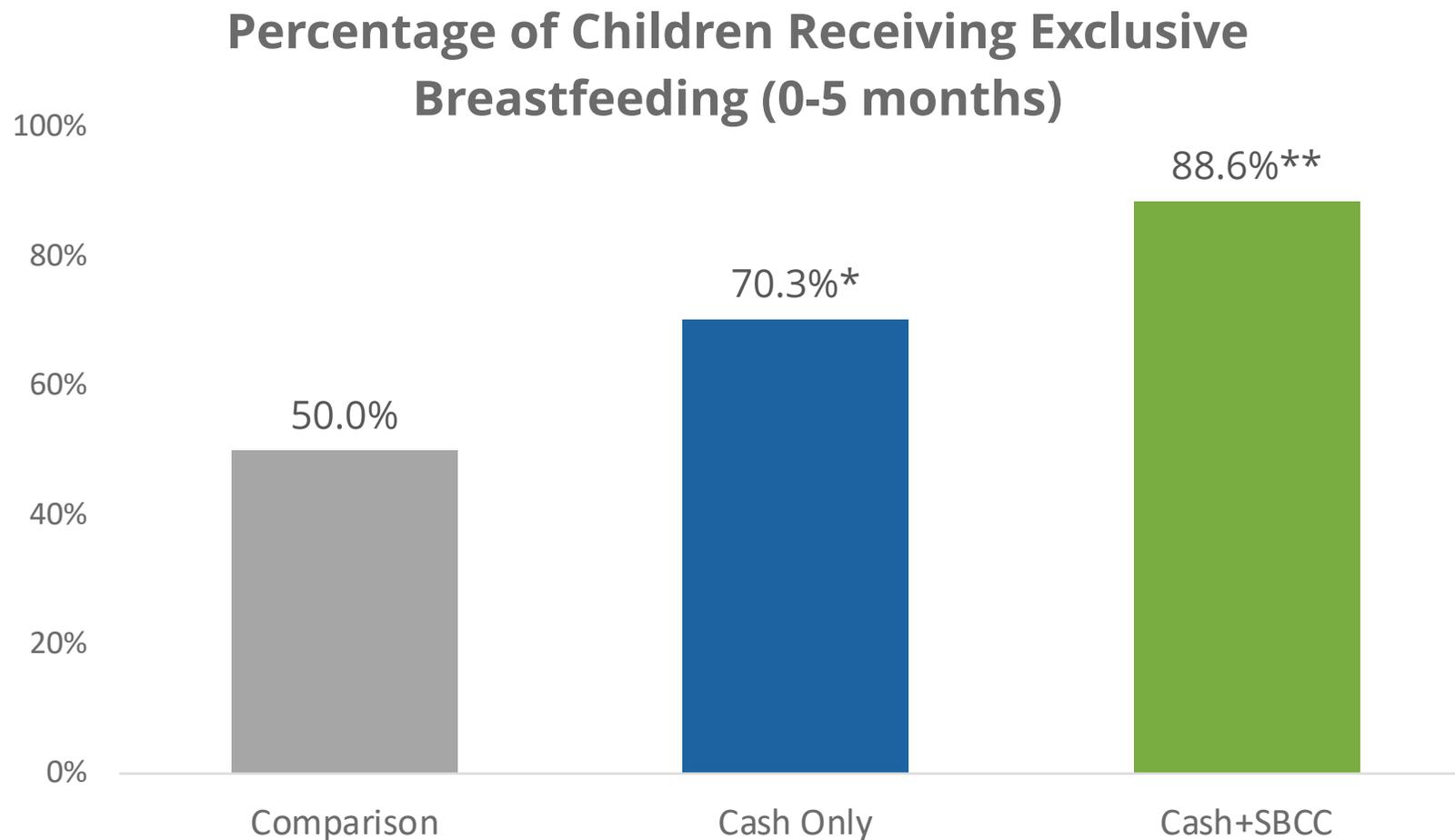
## Women's Knowledge of Breastfeeding



\*\*\* statistically significant at 1%; \*\* statistically significant at 5%; \* statistically significant at 10%



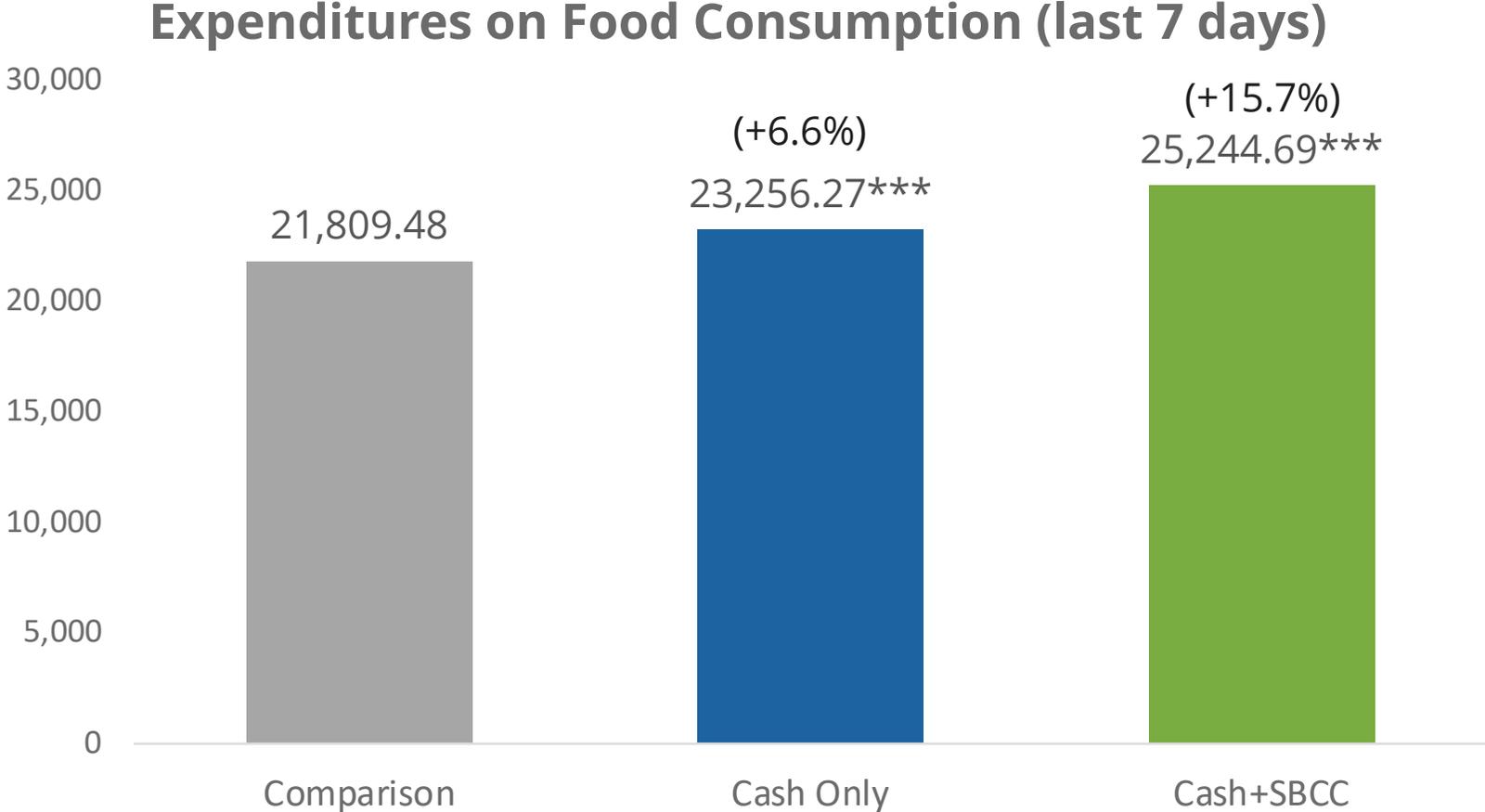
# Cash+SBCC Increased Mothers' Practice of Exclusive Breastfeeding



\*\*\* statistically significant at 1%; \*\* statistically significant at 5%; \* statistically significant at 10%



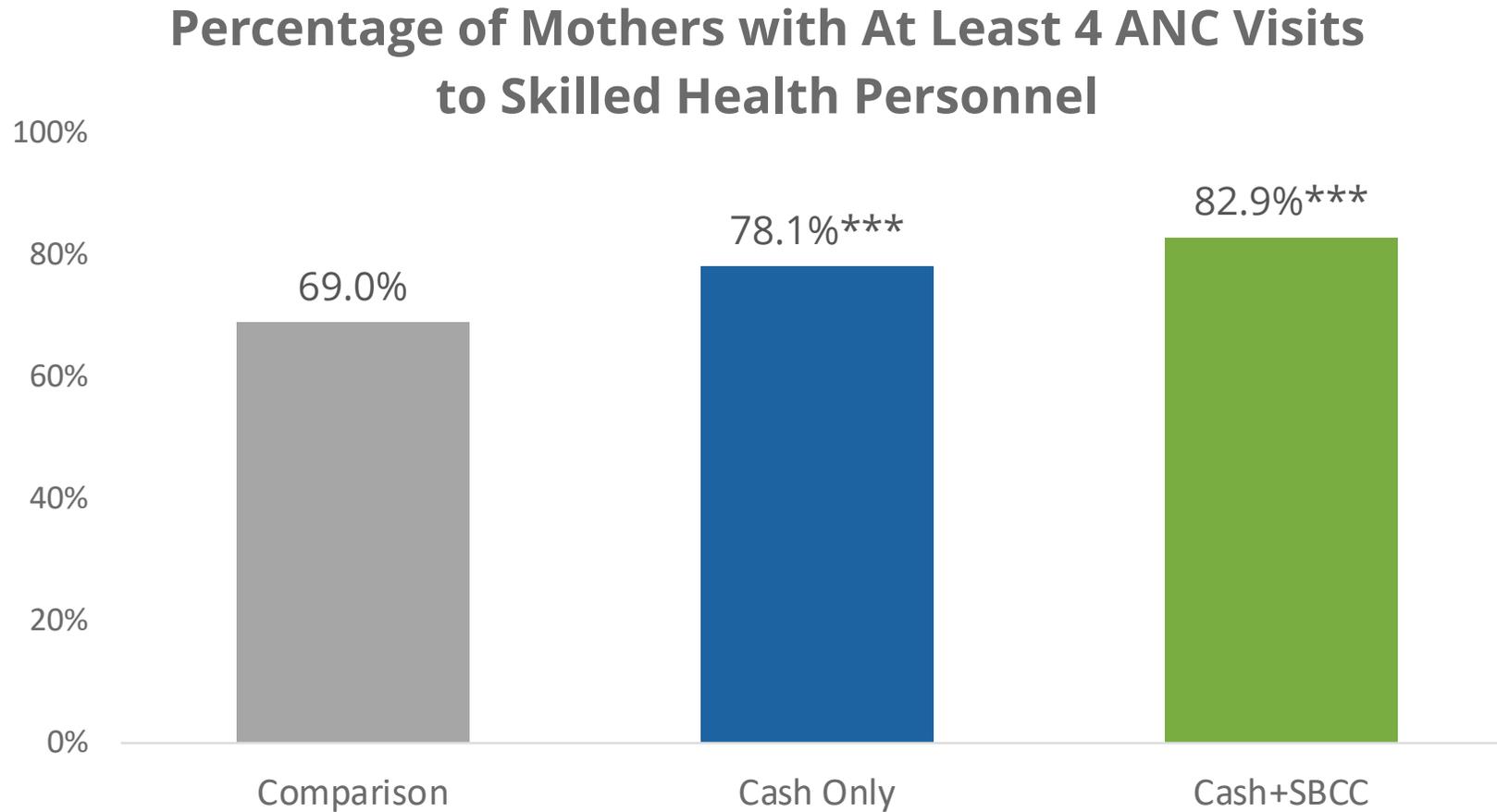
# Recipients In Both Groups Spent More on Food



\*\*\* statistically significant at 1%; \*\* statistically significant at 5%; \* statistically significant at 10%



# Mothers in Both Groups Made More Visits for Antenatal Care



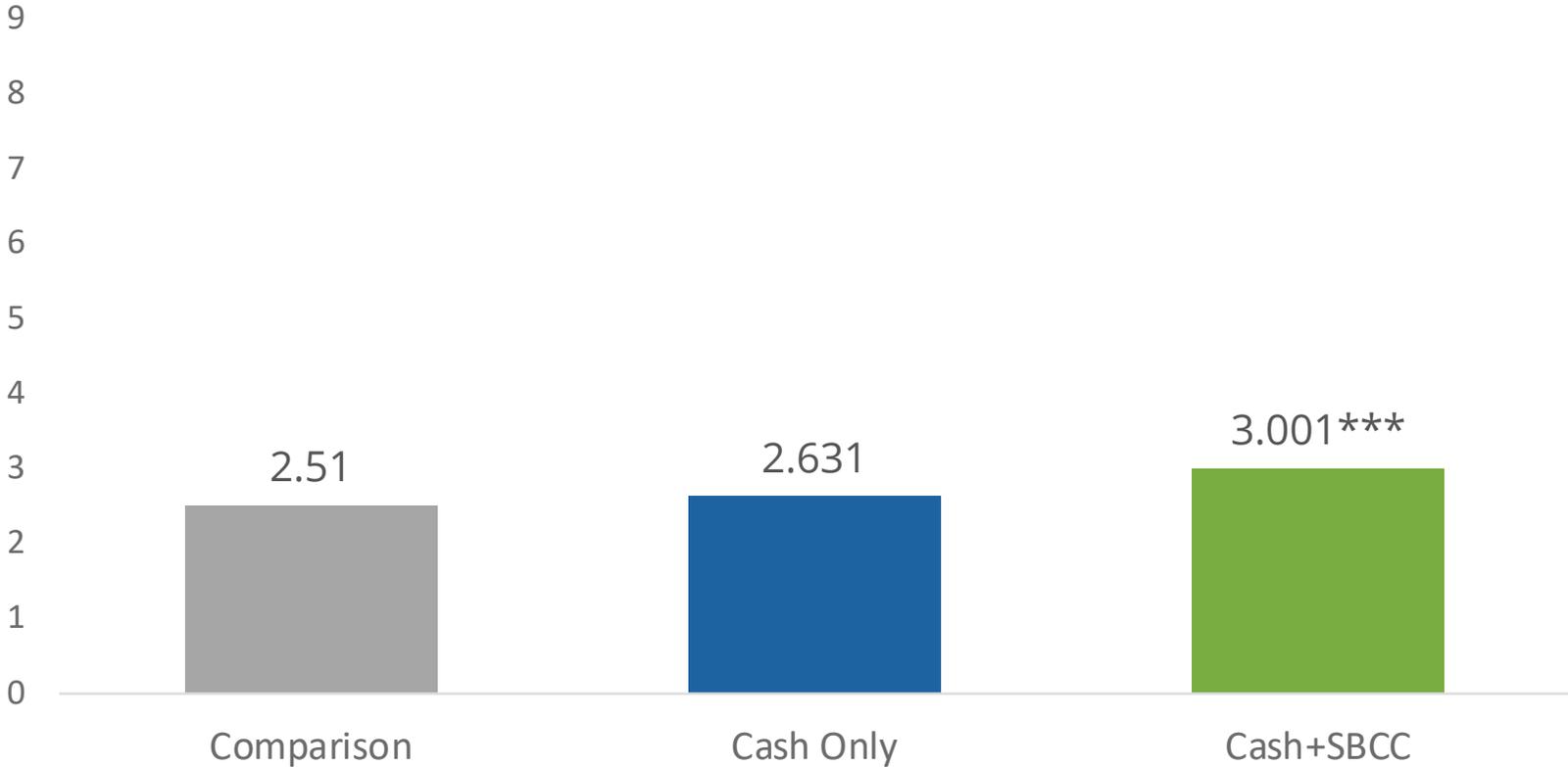
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# Cash+SBCC Increased Participants' Hand-Washing Behavior

Cumulative score of all adopted practices (from 1 to 9)

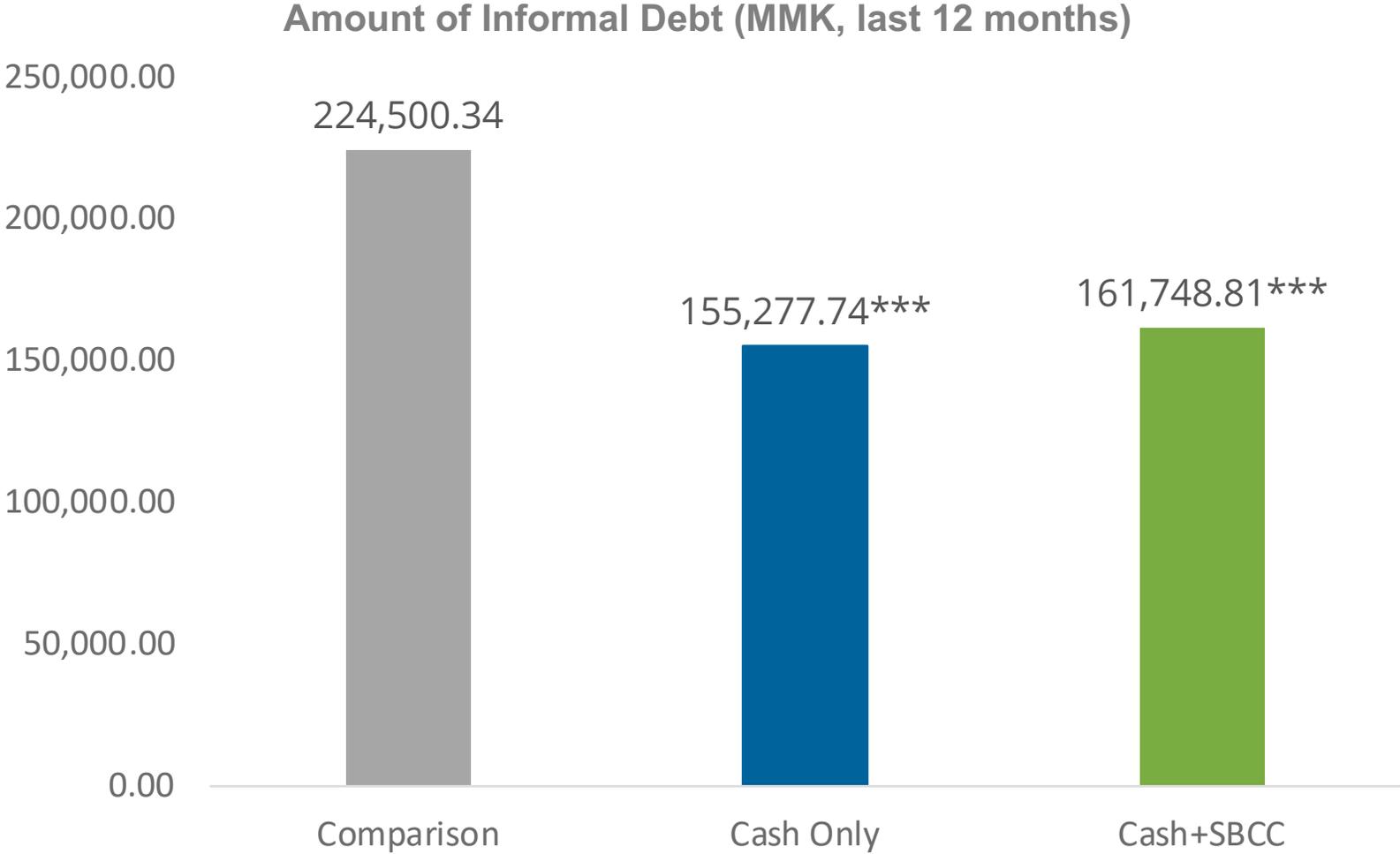
### Average Score on Index of Hand-Washing Behavior



\*\*\* statistically significant at 1%; \*\* statistically significant at 5%; \* statistically significant at 10%



# Households in Both Groups Reduced Informal Debt



\*\*\* statistically significant at 1%; \*\* statistically significant at 5%; \* statistically significant at 10%



# The Government Model

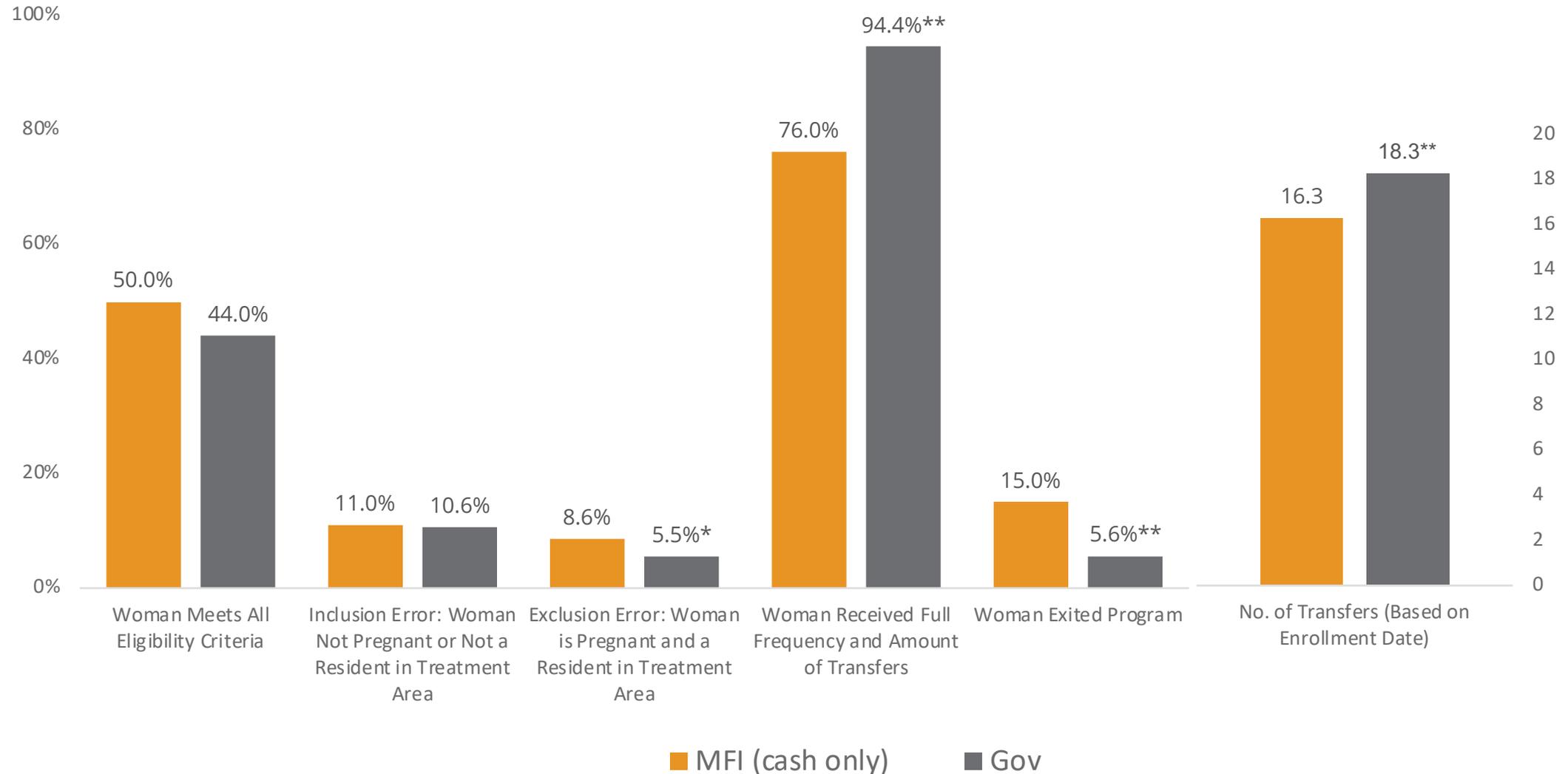
Cash delivered by midwives

- **Government Model:** cash delivered by midwives
- **Microfinance Model:** cash delivered by PGMF
- Pakokku township: 40 GOV villages vs 48 Cash-Only villages
- We select *comparable villages* in the two models



# The Government Model

## Cash delivered by midwives





## Key Takeaways

# Policy Lessons

## Importance of SBCC

### **1. Cash transfers aiming to benefit young children should be combined with SBCC.**

- According to monitoring data, more than 90% of enrolled women participated in SBCC (81% attended 5 times or more).
- 99.6% of mothers reported to be responsible to make decisions on cash transfer amount.
- Cash transfers alone may not be enough to influence mothers' behavior and children's health outcomes.



# Policy Lessons

Importance of first 1,000 days of life

## **2. Results underscore the importance of reaching children in the first 1,000 days of life.**

- Impacts of the program are more pronounced in children that received nearly 30 months of cash and SBCC exposure.



# Q&A

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