

Barriers and a Concurrent National Behavior Change Campaign

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Background

Self-help groups (SHGs) are an important platform for delivering livelihoods, health and nutrition behaviour change communication (BCC) and social support interventions to rural women, particularly in India.

The evidence on improving maternal and child nutrition outcomes using SHG-based education interventions is limited and mixed. Further, few studies report on intermediate outcomes along hypothesized pathways to nutrition impact (Fig 1).

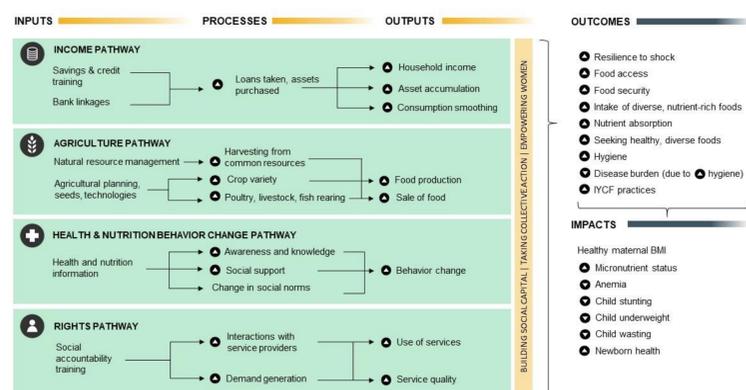


Fig 1. Hypothesized pathways from women's group interventions to nutrition impacts (from Kumar et al. 2017)

Research Questions

1. What impact did an information-only nutrition BCC intervention delivered to women with young children through agriculture-focused SHGs in five Indian states have on maternal and young child diet and anthropometry?
2. To what extent did this intervention benefit intermediate outcomes related to income generation, agricultural livelihoods, health- and nutrition-related behavior change, rights, and women's empowerment?

Methodology

Design: Quasi-experimental impact evaluation with repeated cross-sectional surveys in 2017-18 (N=1609) and 2019-20 (N=1841).

Setting: rural India – households were sampled in 16 blocks within 8 districts within 5 states (Fig 2).

Participants: mothers with children aged 6-24 months (not only SHG members).

Interventions: Women in 8 treatment blocks received a Nutrition Intensive (NI) BCC intervention delivered by a trained female volunteer during SHG meetings. Using a story-telling technique, messages – on maternal and child health and nutrition, home gardens, and women's wellbeing among other topics – were delivered over a 3-year period through a series of Perspective Building Modules (PBM) followed by a Revision Module (RM) to reinforce key messages.

Women in 8 comparison blocks received standard (STD) PRADAN – a local NGO who organized the groups – interventions focused on savings and livelihoods.

Independent from the evaluated interventions, the Government of India rolled out POSHAN Abhiyaan as part of the National Nutrition Mission (Fig 3).

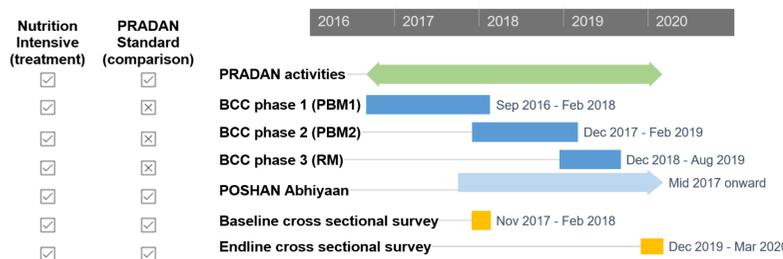


Fig 3. Timeline of interventions and surveys



Fig 2. Study areas

Methodology, cont.

Impact assessment We used matching methods with difference-in-difference (DID) regression models to estimate impacts with bootstrapped standard errors. Covariates used for matching included household, respondent and village level characteristics.

Nutrition outcomes:

- Infant and young child feeding practices – early breastfeeding initiation, diet diversity, consumption of food groups
- Child anthropometry – HAZ, WAZ, WHZ, stunting, underweight, wasting, MUAC
- Women's diet – diversity and food groups
- Women's anthropometry – BMI, underweight, MUAC

Intermediate path indicators:

- *Nutrition behavior pathway* – knowledge, antenatal experiences
- *Income pathway* – asset ownership
- *Agriculture/livelihoods pathway* – household food security (HFIAS), crop production diversity
- *Rights pathway* – awareness of government schemes for pregnant women
- *Empowerment pathway* – women's decision-making and gender attitudes

Results

Sample characteristics:

Overall, women were 26 years old and had 5 years of completed education. 40% of women were SHG members, with members belonging to SHGs for 30 months on average. Children were 15 months of age and half were male.

Results, cont.

Exposure:

Exposure was higher in the NI group compared to the STD group, but less than 10% of women in the NI group were able to recall character names or topics from the stories told as part of the BCC intervention. The frequency of discussing nutrition topics was similar among women in NI and STD blocks.

Impacts on nutrition outcomes:

DID models showed a small positive impact on flesh food consumption (Fig 4) but no impacts on child anthropometry or women's diet or anthropometry.

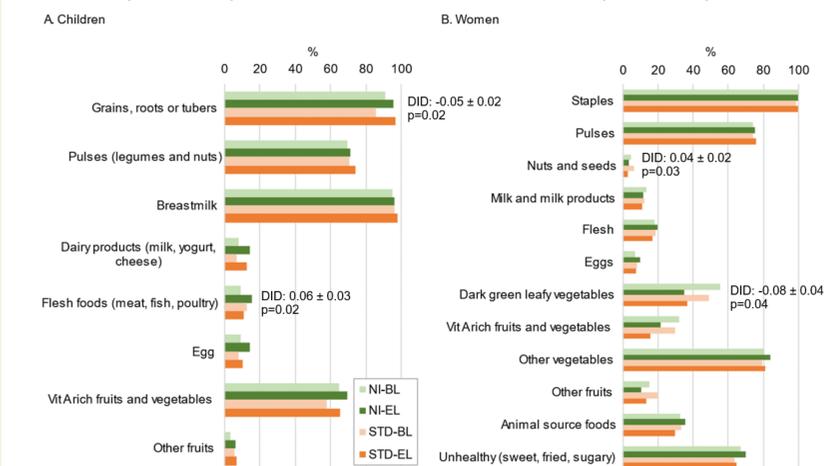


Figure 4. Food group consumption by treatment group at baseline and endline. Difference-in-difference (DID) estimates using kernel matching on the full sample are presented only where significant ($p < 0.05$). NI-BL, nutrition intensive group at baseline; NI-EL, nutrition intensive group at endline; STD-BL, standard group at baseline; STD-EL, standard group at endline.

Impacts on intermediate path indicators:

There was a weak negative impact on women's knowledge (more improvement in STD than NI group), and no impacts on income, agriculture, rights or empowerment pathways.

Conclusions

Limited impacts on nutrition outcomes may be due to limited exposure, low motivation or skills of volunteers, and a concurrent national nutrition behavior change program targeting mothers and children in all study areas.