

Microfinance-based self-help groups: Outcomes from rural India

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Step 1: Specify the measure you have implemented

Women's participation in microfinance-based self-help groups (SHGs) and the resultant social capital provides a basis to address the gap in health attainment for poor women and their children. We conducted a field study to investigate the effect of combining a health program designed to improve health behaviours and outcomes with a microfinance-based SHG program. To assess the effect of combining a health program with a microfinance-based SHG program, a difference-in-difference analysis was conducted through two rounds of surveys to collect baseline and one-year follow-up data from intervention and matched comparison group.

Here we present an implementation report of the study. Five indicators were selected to assess the benefit of combining a health program with SHGs: diarrhoea among children, institutional delivery for babies, colostrum feeding to newborns, toilet at home, and money spent on treatment.

Step 2: Background to your organisation

The study was conducted in 34 villages from three blocks (district subdivision) of India: one in Gujarat, and two in Karnataka. Half of the villages were identified for roll out of the health program. These villages were the intervention arm for the study. For the purpose of this study, we selected matched comparison villages from the same block. The comparison villages were from the microfinance program areas with no health program. Village pairs were matched on four criteria: population size, SHG membership, location in the same block but not with a common boundary.

The study blocks were chosen primarily for two reasons: a. the local communities in the blocks had access to microfinance services from two organizations (the Self Employed Women's Association (SEWA) in Gujarat, and the Shri Kshetra Dharamstala Rural Development Project (SKDRDP) in Karnataka) and b) a set of villages from these blocks were identified for roll out of a health program at the start of the study.

The health program was designed to address issues related to reproductive and child health, immunization, hygiene and sanitation; home visits by a village health worker to reinforce the health messages, conduct child growth monitoring, and identify and refer people with danger signs of pregnancy and child health complications; and health insurance to cover cost of illness. This gave the opportunity to assess change in key health measures before and one year after implementation of the health program.

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Step 3: Record what is already known about this outcome measure

Diarrhoea among children was the primary indicator for measuring the impact of the health program. Changes in episodes of diarrhoea in children are considered to be a sensitive indicator of health program effectiveness in the short-term. Institutional delivery of babies is an important indicator in monitoring progress towards Millennium Development Goal 5 (to reduce the maternal mortality ratio by three quarters between 1990 and 2015). Not feeding colostrum to newborn babies, along with late initiation of breastfeeding and improper complementary feeding were found to be significant risk factors for underweight among children. The practice of open defecation poses a major challenge for health and safety in India, a fact acknowledged at the highest political level. With half of the population defecating in the open, there is a high risk of microbial contamination of water, which poses a major health risk to surrounding communities. The indicator related to money spent on treatment was selected to measure any reduction in out-of-pocket treatment expenditure as a result of the health program.

Step 4: Numerator

For the variable diarrhoea among children, numerator was last born child less than two years reported with diarrhoea in two weeks preceding the survey. For the variable institutional delivery, numerator was any delivery in a government or private institution or assisted by a skilled birth attendant. For the variable feeding colostrum to newborn, numerator was mother who had not thrown away their first milk. For the variable toilet at home, numerator was having a toilet at home at the time of the survey. The variable money spent on treatment was aggregate expenditure of money spent in paying official charges, including payments for laboratory test in the last month, pay for medicine, money spent for travel to and from medical consultation, and unofficial charge or value of gifts made to the medical staff in the last month.

Step 5: Denominator

Denominator at the time of baseline survey was women of reproductive age, having a child aged less than two years. During the one year follow-up survey, questions were asked for delivery experiences in the last one year.

Step 6: Implementation of the outcome

The inclusion criteria at the time of baseline recruitment were women of reproductive age, having a child aged less than two years. An equal number of respondents were recruited from the intervention and comparison villages, based on the calculated sample size.

A list of SHG members in the intervention and comparison villages was made available by the participating NGOs. Based on the list, eligible houses in each village were identified. Based on the calculated sample size, households proportionate to size were selected using systematic random sampling. In case of non-consent, the next household was approached for the study.

Field investigators with prior experience in conducting similar research were hired locally to conduct the survey. All field investigators participated in a two-day training session that included survey administration, discussion on ethical issues associated with research and compliance with the study protocol. The training included elements of role play where field investigators practiced asking for consent, and trialled different ways to conduct the interviews. In the case of questions related to knowledge of services or illness, investigators were instructed not to prompt for responses in the first place, and to encourage participants to answer from their own knowledge and beliefs.

After completion of the survey, all data were entered into a purpose-built SPSS electronic database using a double-entry system. All participant identifiers were removed from the final dataset, final report and publications arising out of the study.

Step 7: Changes made to improve this outcome

Before developing the questionnaire, a series of informal discussions with program managers and community members was conducted to determine key socio-economic variables to be measured. Questions related to socio-economic variables were the same as those used in the DLHS III survey, while the section on health expenditure was adapted from the National Sample Survey on Household Consumer Expenditure, which was conducted in all Indian states in 2009-10. The questionnaire was pilot-tested in villages that were not part of the study. Feedback from the NGO program managers and community members contributed to the redesign of the questionnaire.

Step 8: Implications of this outcome measure

The five indicators selected for the study are important predictors of maternal and child health. The results were observed over a one-year follow-up period, and adjusted for pre-program measures, and socio-economic characteristics of the household. The effects are observed in a real-life setting associated with real-life challenges to program implementation.

Step 9: Related outcomes

The outcome measures were complemented with 17 focus group discussions involving 153 participants from the intervention villages, and 17 key informant interviews with village health workers.

Step 10: Ratings

Please rate 1-5 (1 being the lowest and 5 being the highest) for the following measures of your outcome:

Ease of implementation (1, 2, 3, 4, 5): **5**

Ease of data collection (1, 2, 3, 4, 5): **5**

Sustainability of outcome (1, 2, 3, 4, 5): **4**

Evidence base for outcome (1, 2, 3, 4, 5): **4**

Reliability of outcome (1, 2, 3, 4, 5): **4**

Acknowledgement

The research was supported by a Research Higher Degree grant from the Nossal Institute for Global Health at The University of Melbourne, Australia, and a Wellcome Trust Capacity Strengthening Strategic Award to the Public Health Foundation of India and a consortium of UK Universities. Associate Professors Peter Annear and Michelle Kermode from the Nossal Institute for Global Health provided useful guidance in the study and data analysis.

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