

Madagascar - MAHAY Study 2016, Endline

Development Economics Poverty and Inequality Unit (DECPI), School of Public Health, Program in International and Community Nutrition, School of Public Health

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Identification

SURVEY ID NUMBER

MDG_2016_MAHAY-EL_v01_M

TITLE

MAHAY Study 2016, Endline

SUBTITLE

Endline

COUNTRY/ECONOMY

Name	Country code
Madagascar	MDG

STUDY TYPE

Other Household Survey [hh/oth]

SERIES INFORMATION

This randomized control trial evaluation consists of three rounds of data collection: a baseline survey during the second quarter of 2014, a midline survey in 2015, and an endline survey in 2016. Interventions started in September 2014 in all the treatment groups. The baseline survey can be accessed through the World Bank Microdata Library using the following link: <https://microdata.worldbank.org/index.php/catalog/3877>. The midline survey can also be accessed through the Microdata Library using the following link: <https://microdata.worldbank.org/index.php/catalog/4199>. The endline survey is documented here.

ABSTRACT

The MAHAY study uses a multi-arm randomized-controlled trial (RCT) to test the cost-effectiveness of combined interventions to address chronic malnutrition and poor child development. The arms of the trial are: (T0) existing community-based nutrition program with monthly growth monitoring and nutritional/hygiene education; (T1) is T0 + home visits for intensive nutrition counseling within a behavior change framework; (T2) is T1 + lipid-based supplementation (LNS) for children 6-18 months old; (T3) is T2 + LNS supplementation of pregnant/lactating women; and (T4) is T1 + intensive home visiting program to support child development.

Trial Registration: Current Controlled Trials ISRCTN14393738. Registered June 23, 2015.

KIND OF DATA

Sample survey data [ssd]

UNIT OF ANALYSIS

Pregnant women, children 0-11 months old and respective households at baseline (2014)

Version

VERSION DESCRIPTION

v01: Edited, anonymous datasets for public distribution

Scope

NOTES

This study is composed of data sources that cover the following topics:

Household Questionnaire

- Identification
- Household Roster
- Education

- Occupation
- Dwelling
- Assets
- Shocks past 12 months
- Food Security

Female Questionnaire

- Reproduction
- Pregnancy Antenatal Care (target child and youngest sibling)
- Birth/Delivery, Breastfeeding
- Infant/Child Feeding, Child Food Diversity
- Responsive Feeding
- Child morbidity (new module)
- Knowledge/practices about hygiene
- Maternal knowledge about child feeding and child development
- Maternal Food Diversity
- Time Use previous 24h
- Participation to T1-T4 activities
- Anthropometric and anemia measurements

Infant Questionnaire

- Primary Caregiver, Family Care Indicators
- Ages and Stages Questionnaire Inventory
- Questionnaire Ages and Stages - Communication
- Questionnaire Ages and Stages - Gross Motor
- Questionnaire Ages and Stages - Fine Motor
- Questionnaire Ages and Stages - Problem Solving
- Questionnaire Ages and Stages - Socialization
- Depression (CESD) scale
- Receptive Vocabulary mother/primary caregiver
- Perception on the role of parents and subjective perception of child nutrition, child development (new module)

Community Health Worker Questionnaire

- Demographics
- Assets
- Site Characteristics
- Occupation
- Support Group
- Training
- Local Health Center
- Motivation Scale
- Knowledge (Nutrition, Development)
- Skills and practical knowledge of hygiene
- Receptive Vocabulary (PPVT)

Community Questionnaire - Village (Fokontany):

- Population and Households of Fokontany
- Physical, Administrative and Socio-Economic Infrastructures
- Organizational Structures of the Fokontany
- Food Security and Prices
- Production Risks and Shocks

KEYWORDS

Keyword
Nutrition, Child Development, Randomized Control Trial, Madagascar

Coverage

GEOGRAPHIC COVERAGE

The five regions of south and southeast Madagascar included in the study are Amoron'i Mania, Androy, Atsimo Atsinanana, Haute Matsiatra, and Vatovavy-Fitovinany.

GEOGRAPHIC UNIT

Village (Fokontany)

UNIVERSE

The target population is pregnant women and children eligible to attend the national community based nutrition program.

Producers and sponsors

PRIMARY INVESTIGATORS

Name	Affiliation
Development Economics Poverty and Inequality Unit (DECPI)	The World Bank Group
School of Public Health	University of California, Berkeley
Program in International and Community Nutrition	University of California, Davis
School of Public Health	University of Nevada, Reno

PRODUCERS

Name	Affiliation	Role
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Lisy Ratsifandrihamanana	Centre Médico-Educatif 'Les Orchidées Blanche'	Primary Investigator

FUNDING AGENCY/SPONSOR

Name	Abbreviation	Role
Strategic Impact Evaluation Fund	SIEF	
Research Budget Committee	RSB	
The World Bank Innovation Grant		
Early Learning Partnership	ELP	
National Nutrition Office	ONN	Interventions

Sampling

SAMPLING PROCEDURE

Our sampling frame is the universe of community nutrition project sites in the five target regions of the program. From this universe of project communities, we drew a sample of communities that was randomly assigned to five groups. The comparison group for our study is the program as currently designed (as opposed to no program in most of the evaluation literature). In the four randomized arms, we have sequentially added increasing levels of intensity and complexity to the current intervention, starting with the lowest cost option and incrementally adding layers of intensity (and cost) to test the value added of each layer in terms of their ability to reduce stunting/growth faltering and promote child development.

DEVIATIONS FROM THE SAMPLE DESIGN

Our sample of interest is the cohort of children (and their households) sampled at baseline and followed longitudinally at midline and at endline surveys. The sample was drawn from the census of children enrolled in the community-based

intervention in December 2013 and updated in May 2014 in preparation for the baseline fieldwork. A sample of 3,738 households with either pregnant women or with children aged 0-11 months old was selected at baseline. At midline and endline, tracking protocols were put in place with the objective to minimize attrition and preserve a sample that reflected the target population of children in the program site. The following tracking criteria were followed:

- * if the pregnant woman had a miscarriage or died, or if the target child had died, the household was considered as lost
- * if the target child had temporarily moved within the catchment area of the program sites, the child should be located and interviewed;
- * if the target child had moved outside the catchment area (and therefore not eligible to receive the services), the household would be replaced with a household randomly chosen from within the same age group;
- * if the target child returned to the original household after their temporary migration at endline, both the original household and its replacement household at midline were interviewed at endline.

Data Collection

DATES OF DATA COLLECTION

Start	End	Cycle
2016-09	2016-11	Endline

DATA COLLECTION MODE

Computer Assisted Personal Interview [capi]

SUPERVISION

Local non-governmental organizations (NGOs) were responsible for providing program supervision. To minimize contamination of intervention by supervisors, these NGOs were randomly sampled with one site per NGO supervisor, and stratified by region, whenever possible.

DATA COLLECTION NOTES

Data collection was conducted using Survey Solutions (<https://mysurvey.solutions/en/>).

The unit of randomization is the project site or community. Within each region/stratum, 25 project sites were randomly assigned to the four treatment arms and one comparison arm. The intervention groups are as follows:

T0: Program as currently designed ("status quo comparison") - community based nutrition program with growth monitoring and education. Our counterfactual policy scenario is not a "no program" group. T0 had the existing program, which includes nutrition messages, growth monitoring, cooking demonstrations and brief counseling (a short, 5-min, discussion with the mother immediately after her child is weighed).

T1: Intensive counseling - the existing community-based program was enhanced with intense training with material and protocols for counseling and referral when indicated. An added community nutrition worker was selected in intervention communities to carry out home visits for nutrition counseling, with higher frequency of visits for the younger children (monthly visits for the 0-8 month-olds) and decreasing frequency for older children. All pregnant women and children 0-2 enrolled in the community program were eligible for receiving the nutrition counseling. A particular emphasis of the enhanced training was given to communication and listening skills, and to problem solving strategies for food security.

T2: Intensive counseling + lipid based supplementation to children 6-18 months - delivered in a monthly ration providing 20 g per day of supplement (under the brand name "Kalina Be") per child in the household. All children 6-18 months enrolled in the community program were eligible for receiving the supplement.

T3: Intensive counseling + lipid based supplementation to children 6-18 months + pregnant and lactating women - delivered in a monthly ration providing 20 g per day ("Kalina Be") of supplement per child plus 40 g per day ("KalinaReny") for mothers in the household. All pregnant women and children 6-18 months enrolled in the community program were eligible for receiving the nutrition supplement.

T4: Intensive counseling based on infant and young child feeding practices + early childhood stimulation and development for children 6-18 months - delivered via twice monthly one-on-one home visits with the added community health worker, who provides intensive feedback regarding early stimulation for the target child. For the purpose of the pilot, the 30 children randomly drawn to be participating in the baseline survey were eligible for the ECD home visits (in addition to the nutrition intensive counseling component). The eligible children and mothers within the project site who were not selected for the

ECD home visits were provided a community based play activity at the project site for a few days a week (ludotheque).

The randomized control trial evaluation consists of three rounds of data collection: a baseline survey during the second quarter of 2014, a midline in 2015, and an endline in 2016. Interventions started in September 2014 in all the treatment groups.

DATA COLLECTORS

Name	Abbreviation
ProESSECAL Survey Firm	ProESSECAL

Questionnaires

QUESTIONNAIRES

The following questionnaires were used for data collection:

The Household Questionnaire includes detailed sections on demographics, housing/water and sanitation, education, household expenditures, food security, and shocks. The household questionnaire was administered to the household head, or in his/her absence to the most informed household member. Data on food security status was collected using the Household Food Insecurity Access Scale (HFIAS) developed by the USAID-funded Food and Nutrition Technical Assistance II project (FANTA) and on dietary diversity using the Household Dietary Diversity Score (HDDS).

The Female and Child Questionnaire were administered to all primary caregivers of the target children. At baseline, all primary caregivers were asked about fertility. Mothers were administered sections on knowledge about nutrition and child development, as well as a module on child appetite and responsive feeding. A child questionnaire was administered to all primary caregivers include delivery information, breastfeeding history and status, timing introduction of complementary feeding, morbidity, and a 24 hour dietary recall. Child weight, height, and mid upper-arm circumference were measured at baseline in duplicate using techniques described for the WHO Multicenter Growth Reference Study. Child development was assessed using The Ages and Stages Questionnaire Inventory (ASQI), which is a comprehensive self-report maternal assessment of child development. ASQ-I is a continuous version of child development and progress as opposed to the more widely used ASQ-3 screening tool. The subscales measure skills in Communication, Gross Motor, Fine Motor, Personal-Social and Problem-Solving domains. In addition, pregnant women and primary caregivers were also administered a module on depression, using the Center for Epidemiological Studies Depression Scale (CESD) and administered a test on receptive vocabulary, using the Peabody Picture Vocabulary Test (PPVT) already adapted for Madagascar.

The Community Health Worker Questionnaire was administered to both the community nutrition worker (ACN) and the added community nutrition worker (ACDN, if already identified at baseline). The questionnaire includes demographics and socio-economic information about the community worker (education, occupation, household assets) and a Motivation Scale. The community workers were administered the same test of receptive vocabulary, using the Peabody Picture Vocabulary Test (PPVT) administered to the primary caregiver. In addition, the questionnaire has specific sections about the site characteristics, the characteristics and composition of a volunteer support group, the referral to a health center and the training received.

A Community Questionnaire was administered to a group of informed leaders about the size and population of the village (Fokontany), accessibility and availability of local infrastructure, the presence of associations in the village, the occurrence of weather shocks and production shocks.

The questionnaires are provided in French and Malagasy and are available for download.

Access policy

CONTACTS

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ACCESS CONDITIONS

Public Access

CITATION REQUIREMENTS

Use of the dataset must be acknowledged using a citation which would include:

- the identification of the Primary Investigator
- the title of the survey (including country, acronym and year of implementation)
- the survey reference number
- the source and date of download

Example:

Emanuela Galasso (DECPI, The World Bank Group), Lia C. H. Fernald (School of Public Health, University of California, Berkeley), Christine P. Stewart (Program in International and Community Nutrition, University of California, Davis) and Ann M. Weber (School of Public Health, University of Nevada, Reno). Madagascar - MAHAY Study 2016, Endline. Ref: MDG_2016_MAHAY-EL_v01_M. Dataset downloaded from [URL] on [date].

ACCESS AUTHORITY

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Development Economics Poverty and Inequality Unit (DECPI)	The World Bank Group		Link
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LOCATION OF DATA COLLECTION

World Bank Microdata Library

Disclaimer and copyrights

DISCLAIMER

The user of the data acknowledges that the original collector of the data, the authorized distributor of the data, and the relevant funding agency bear no responsibility for use of the data or for interpretations or inferences based upon such uses.

Metadata production

DDI DOCUMENT ID

DDI_MDG_2016_MAHAY-EL_v01_M_WB

PRODUCERS

Name	Abbreviation	Affiliation	Role
Development Economics Data Group	DECDG	The World Bank Group	Documentation of the study

DATE OF METADATA PRODUCTION

2023-07-13

DDI DOCUMENT VERSION

Version 01 (July 2023)

Data Dictionary

Data file	Cases	Variables
acn.dta This dataset includes data related to the Community Health Worker Questionnaire.	224	252
acn_bien.dta This dataset includes a roster/table of asset ownership of the community worker.	3825	3
enfant_idmere.dta This dataset includes data related to the Child Questionnaire and the Female Questionnaire.	3643	345
men_assistance_aide.dta This dataset includes a roster/table for type of assistance received.	32823	4
men_betails.dta This dataset includes a roster/table of household livestock ownership.	43764	4
men_bien.dta This dataset includes a roster/table of household asset ownership. This is related to section E of the Household Questionnaire.	61999	3
men_chocs.dta This dataset includes a roster/table of household shocks. This is related to section F of the Household Questionnaire.	72940	6
men_emploi_du_temps.dta This dataset includes a roster/table of time use for the mother/caregiver. This is related to section L of the Female Questionnaire.	40117	10
men_sante.dta This dataset includes a roster/table for the type of morbidity experienced by the target child. This is related to section FM of the Female Questionnaire.	32823	7
men_tableau.dta This dataset includes the household roster. This is related to section B of the Household Questionnaire.	24037	68
menage.dta This dataset includes data related to the Household Questionnaire.	3647	679
vil_assistance_aid.dta This dataset includes a table/roster of the kinds of assistance received by the village.	1125	4
vil_chocs.dta This dataset includes a table/roster of shocks experienced in the community.	1750	15
vil_respondents.dta This dataset includes a table/roster of who was interviewed in the village survey.	438	7
vil_roster_securite_alimentaire.dta This dataset includes a table/roster of local availability of main staples/prices.	1875	9
village.dta This dataset includes data related to the Community Questionnaire - Village (Fokontany).	125	58
acn_calendrier.dta This dataset includes calendar site activities for the past month.	1350	4