

# Evaluation of an integrated mother and child grant project in Malawi

<b>Submission date</b> 04/03/2022	<b>Recruitment status</b> No longer recruiting	<input checked="" type="checkbox"/> Prospectively registered <input checked="" type="checkbox"/> Protocol
<b>Registration date</b> 07/03/2022	<b>Overall study status</b> Ongoing	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
<b>Last Edited</b> 15/01/2024	<b>Condition category</b> Nutritional, Metabolic, Endocrine	<input type="checkbox"/> Individual participant data <input type="checkbox"/> Record updated in last year

## Plain English summary of protocol

### Background and study aims

Children in Malawi face high rates of malnutrition and are at risk of not reaching their developmental potential. In Malawi, community-based childcare centres (CBCCs) can be cost-effective platforms for scaling-up nutrition social behaviour change (SBC) interventions. However, evidence also suggests potential synergies from coupling nutrition SBC to cash transfers (CT) in Malawi, given that rural households face high levels of poverty and recurring extreme lean season food-security shocks. The aim of this study is to evaluate the cost-effectiveness of using CBCCs and parenting care-groups as platforms to improve maternal diets and child nutrition and development by providing nutrition-sensitive behaviour change and cash transfer intervention packages in communities already receiving a standard of care Government early childhood development (ECD) SBC program.

### Who can participate?

1. Women aged 15 to 49 years who are pregnant living in the catchment area of the CBCC whose pregnancy is confirmed by a urine pregnancy test
2. Mothers (aged 15 to 49 years) of children aged under 24 months and their youngest children living in the catchment area of the CBCC

### What does the study involve?

Communities will be randomly allocated to one of four groups to receive:

1. Standard of Care (SoC): the standard Government ECD SBC program
2. The SoC intervention with additional nutrition, ECD and agriculture SBC activities to improve nutritious food production, diets and care practices for young children
3. SoC plus SBC plus a maternal and child cash transfer of about US\$20 per month
4. SoC plus SBC plus a maternal and child cash transfer of about US\$35 per month

The intervention lasts 3 years.

### What are the possible benefits and risks of participating?

The intervention could improve the diets and feeding practices of participants through improved knowledge of caregivers resulting from the nutrition SBC. The SBC intervention could also influence farming practices, increasing production and changing crop production mix. This could in time (and after the main harvest) improve the household availability of nutritious foods

and combined with the parent nutrition training result in improved diets at home. The additional focus on diets and nutrition could reinforce the focus on care and stimulation of young children, improving synergies across the two sectors, whilst increasing the salience of the core training and its relevance within households and the community. The cash transfer intervention is expected to directly increase women's income and empowerment, while also support the changing of preferences and attitudes related to nutritious foods; increasing physical, emotional and financial resources to channel towards maternal and child health, child nutrition and development, including to improve the meals at home and in the CBCCs. There are no known risks related to the intervention involved.

Where is the study run from?

1. International Food Policy Research Institute (USA)
2. Save the Children (Malawi)

When is the study starting and how long is it expected to run for?

February 2022 to December 2025

Who is funding the study?

1. The Power of Nutrition (UK)
2. Conrad N Hilton Foundation (USA)
3. Foreign, Commonwealth and Development Office (UK)

Who is the main contact?

Dr Aulo Gelli

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## Contact information

### Type(s)

Principal Investigator

### Contact name

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## Additional identifiers

### EudraCT/CTIS number

Nil known

**IRAS number****ClinicalTrials.gov number**

Nil known

**Secondary identifying numbers**

IFPRI\_PON\_17022022

## **Study information**

**Scientific Title**

Impact evaluation of a maternal and child cash transfer intervention, integrated with nutrition, early-childhood development and agriculture in Malawi

**Acronym**

MAZIKO

**Study objectives**

The MAZIKO trial is aimed at evaluating the cost-effectiveness of using the integrated community-based childcare centre (CBCC) and care-group platform to improve maternal and child nutrition and development by providing variations of nutrition-sensitive intervention packages in communities receiving standard Government support.

**Ethics approval required**

Old ethics approval format

**Ethics approval(s)**

Approved 27/02/2022, International Food Policy Research Institute (IFPRI) IRB (1201 Eye Street NW, Washington, DC, USA; +1 (0)202 862 5600; IFPRI-IRB@cgiar.org), ref: #00007490

**Study design**

Randomized control trial

**Primary study design**

Interventional

**Secondary study design**

Randomised controlled trial

**Study setting(s)**

Community

**Study type(s)**

Other

**Participant information sheet**

Not available in web format, please use contact details to request a participant information sheet

**Health condition(s) or problem(s) studied**

## Maternal and child nutrition and development

### Interventions

The MAZIKO trial is aimed at evaluating the cost-effectiveness of using CBCCs and parenting care-groups as platforms to improve maternal diets, and child nutrition and development by providing nutrition-sensitive behaviour change and cash transfer intervention packages in communities already receiving a standard of care Government early childhood development (ECD) SBC program. This is a 3-year cluster randomised trial in two districts of Malawi, including 160 communities randomised using a public lottery to one of four treatment arms:

1. Standard of Care (SoC) arm: receiving the standard Government ECD social behaviour change (SBC) program
2. SBC arm: receiving the SoC intervention with additional nutrition, ECD and agriculture SBC activities to improve nutritious food production, diets and care practices for young children
3. Low CT arm: SoC plus SBC plus a maternal and child cash transfer ~US\$20 per month
4. High CT arm: SoC plus SBC plus a maternal and child CT ~US\$35 per month.

Duration of intervention: 3 years

### Intervention Type

Mixed

### Primary outcome measure

1. The adequacy of nutrient intake in index women 15-49 years of age at baseline who are pregnant or mothers of index children 0-2 years at baseline, measured through 24 h recall at endline
2. Child development (motor, language and cognition) in index children (in utero to 2 years at baseline) measured using the Malawi Development Assessment Tool at endline

### Secondary outcome measures

1. Diet quality measured using the Global Diet Quality Score in index women 15-49 years of age at baseline who are pregnant or mothers of index children as measured through 24 h recall at endline
2. The adequacy of nutrient intake in index children measured through 24 h recall at endline
3. Height, HAZ, stunting ( $HAZ < -2$ ), weight, weight for height, wasting ( $WHZ < -2$ ), mid-upper arm circumference (MUAC) and head circumference in index children, as measured through anthropometric assessments at endline
4. Effects along the program impact pathways (PIPs) linking program implementation of each randomized interventions to nutrient adequacy of intake in index women and children, and other outcomes by assessing:
  - 4.1. Fidelity of intervention implementation for each of the randomized interventions, defined as conformance with implementation specifications as measured through self-reports at endline
  - 4.2. Quality of CBCC and Care Group training and supervision as measured through self-reports at endline
  - 4.3. CBCC and Care Group volunteer capacity and service provision as related to the All Children Surviving and Thriving framework as assessed by questionnaire and observations at endline
  - 4.4. Attained maternal knowledge and practices as related to the All Children Surviving and Thriving framework as assessed by questionnaire and direct observations at endline
5. Women's empowerment measured using the women's empowerment in agriculture (pro-WEAI) indicator at endline
6. Maternal depression measured using the Self-Reporting Questionnaire (SRQ) at endline
7. Household expenditure levels, shares of expenditures, poverty and food-insecurity levels

assessed by questionnaire at endline

8. Household food consumption elasticities for calories and micronutrients assessed by questionnaire at endline

9. Mother's willingness to pay (WTP) for nutrient-dense complementary foods assessed by questionnaire at endline

If funding permits:

10. Haemoglobin concentration and anaemia prevalence in women and children measured through capillary blood assessment at endline

**Overall study start date**

01/02/2022

**Completion date**

30/12/2025

## **Eligibility**

**Key inclusion criteria**

1. All women aged between 15 to 49 years who are pregnant living in the catchment area of the CBCC whose pregnancy is confirmed by a urine pregnancy test
2. Mothers (aged 15 to 49 years) of children aged <24 months and their youngest children (index) living in the catchment area of the CBCC

**Participant type(s)**

Other

**Age group**

Mixed

**Sex**

Both

**Target number of participants**

160 clusters, with 20 households per cluster

**Key exclusion criteria**

1. Women residing in the study area who are pregnant during the enrolment period but do not consent to participate in the trial
2. Women residing in the study area who self-report being pregnant during the enrolment period but are unable to confirm their pregnancy. These women will be eligible for participation in the program
3. Children with major non-fatal disabilities will not be excluded from study procedures, but will be excluded from the final analysis sample if the disability is likely to directly affect growth and development

**Date of first enrolment**

01/04/2022

**Date of final enrolment**

01/07/2022

## **Locations**

### **Countries of recruitment**

Malawi

United States of America

### **Study participating centre**

#### **International Food Policy Research Institute**

1201 Eye Street NW

Washington, DC

United States of America

20000

### **Study participating centre**

#### **Save the Children, Malawi**

Wilbes Court 3

Off Presidential Highway

Area 14

Lilongwe

Malawi

PO Box 30374

## **Sponsor information**

### **Organisation**

Power of Nutrition

### **Sponsor details**

114-118 Southampton Row

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+44 (0)20 3141 3900

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### **Sponsor type**

Charity

### **Website**

<https://www.powerofnutrition.org/>

## **Funder(s)**

### **Funder type**

Charity

### **Funder Name**

Power of Nutrition

### **Funder Name**

Conrad N. Hilton Foundation

### **Alternative Name(s)**

The Conrad N. Hilton Foundation, CNHF

### **Funding Body Type**

Private sector organisation

### **Funding Body Subtype**

Trusts, charities, foundations (both public and private)

### **Location**

United States of America

### **Funder Name**

Foreign, Commonwealth and Development Office

### **Alternative Name(s)**

Foreign, Commonwealth & Development Office, Foreign, Commonwealth & Development Office, UK Government, FCDO

### **Funding Body Type**

Government organisation

### **Funding Body Subtype**

National government

### **Location**

United Kingdom

# Results and Publications

## Publication and dissemination plan

- 1. Planned publication of results in peer reviewed journals in the fields of nutrition, agriculture and economics
- 2. Planned presentation of preliminary research findings at international conferences and internal IFPRI seminars
- 3. Dissemination with government and civil society organizations in Malawi. The strategy will focus on regular workshops in Lilongwe to personally engage with local institutions, as well as research briefs for local dissemination
- 3. Reaching the international policy community through a range of media (e.g., policy briefs, blogs, video interviews), close engagement with the One CGIAR communication team, and presentations of our findings in major IFPRI reports
- 4. The protocol will be published and other study documents are available on request.

## Intention to publish date

31/12/2025

## Individual participant data (IPD) sharing plan

The current data sharing plans for the current study are unknown and will be made available at a later date.

## IPD sharing plan summary

Stored in publicly available repository

## Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Protocol article</a>		13/01/2024	15/01/2024	Yes	No