

The Mali MaaCiwara* Project Newsletter

July 2023 Issue 3

*(pronounced Maa-Chiwara)

In this third Newsletter

- ❖ Project outline
- ❖ Qualitative research activities
- ❖ Quantitative mid-term evaluation
- ❖ Advisory groups: Trial Steering Committee/Data Management Committee (TSC/DMC); International Expert Advisory Group (IEAG); Mali National Expert Advisory Group (NEAG)
- ❖ Intervention delivery and reminder campaign
- ❖ Capacity building
- ❖ Sub-studies
- ❖ Staff and other project news
- ❖ Next steps

Project Outline

Overall aim - To investigate the impact of a community-based intervention to improve food safety and hygiene, child feeding, and hygienic child play, as well as women's empowerment and community action. **Project Setting:** Urban (Bamako) and rural communities (regions of Bamako, Ségou & Sikasso). **Intervention:** Based upon smaller successful studies in Mali, Bangladesh, Nepal and the Gambia. The current Mali intervention is a 4-day community campaign reinforcing prioritized behaviours and motivational drivers with performing arts, peer support and model mother competition, dispersed across 35 days, plus volunteer home visits in between campaign days, followed by a 9-12 months reminder campaign day. **Evaluation:** 27 Mother-child dyads in each community (6-36 months old) assessed at baseline, ~4- and ~15-months post-intervention. **Planned project period:** February 2021- December 2024. **Outcomes Measured:** Observed diarrhoea; numerous secondary outcomes including child growth and development, and women's empowerment. **Process evaluation:** Qualitative and quantitative process measures and evaluation.

Qualitative research activities



Photo: Mothers' FGDs in a rural community

The MaaCiwara's qualitative research component provides key data on why and how the intervention was effective & how it can be replicated in other communities facing similar challenges. In March-July 2023, two researchers led by Prof Coulibaly carried out:

- **Focus group discussions (FGDs):** 6 in 3 urban and 3 rural communities as a part of the process evaluation of the intervention (36 FGD in total). FGDs focused on the intervention's capacity to achieve 1) behaviour change, 2) the role played by the performing arts, and 3) possible non-health benefits such as women's empowerment or improved community cohesion. Participants were MaaCiwara mothers, mother volunteers (Maa supervisors), fathers, community leaders, grandmothers and mothers who were not directly involved in the intervention, but had some knowledge of/or had participated in some activities.
- **Observations:** Took place at the time of intervention implementation and alongside the FGDs.
- **Preliminary findings:** The intervention was well received, especially in the rural areas. There are also indications that the intervention has led to lasting behavioural change, and enhanced bonds of solidarity among some participating mothers.

Quantitative mid-term evaluation

Mid-term evaluation(February-July 2023 with March Ramadan break) measured the project outcomes ~4-6 months post-intervention.

Survey Field workers: Two teams of 27 female fieldworkers, 2 anthropometric data collectors, 2 supervisors, a laboratory technician, and data management staff, were trained to collect data in 120 urban and rural communities as previously done for baseline evaluation.

Survey: In each community, children 6-36 months were randomly selected to take part. REDCap database was developed and used to collect data. Regular data completeness and data quality checks were routinely carried out throughout the period of data collection. 3420 mother-child

dyads in all 120 communities were evaluated as planned.

Photo: Evaluation field workers about to travel to the field

TSC/DMC, International and Mali Expert Advisory Groups

We are grateful to the various members of our advisory committees that monitor, advise and guide activities of this project: **Trial Steering and Data Monitoring Committee (TSC/DMC)** chaired by Prof Umberto Dalessandro had their second meeting Oct 2022 and provided advice/guidance on the trial progress, especially on few protocol deviations. The Third meeting of TSC/DMC is planned for Sep/Oct 2023.

International Expert Advisory Group (IEAG): Chaired by Prof R Lilford, has members across the UN, NGOs, and academic experts.

Mali Expert Advisory Group (MEAG): Chaired by Prof O Toure has members from Mali representing government bodies, UN agencies, NGOs, bilateral agencies and academics.

Both IEAG at global level and MEAG at national level, provide advice on how to increase impact and dissemination of the project findings in Mali, or globally, thus creating a platform for future replication or scaling up of the intervention, or application of research principles investigated.

Other collaborations with advisors:

Collaborative project with Water Aid and Save the Children investigating WASH in-country views on the practice of communal handwashing before meals in 34 African countries.

Visit to UNICEF HQ: The CI, Dr S Manaseki-Holland visited UNICEF HQ and met nutrition, WASH, Child Health and Evaluation department members to discuss dissemination and impact activities.

Intervention delivery and reminder campaign

Intervention delivery: A 4-day campaign intervention was implemented in our 60 intervention communities, and a one-day campaign on COVID-19 vaccination implemented in our 60 control communities.

Teams: Four intervention teams comprising 4 male and female Public Health officers, and 2 male and female artists were trained to deliver the intervention. This team was supported by community appointed experienced mother volunteers (~5 per community), trained to visit and support mothers between intervention campaign days. On the 4th campaign-day, in each intervention community, mothers meeting the ideal mother criteria received medals as MaaCiwara while volunteers and the head of village received certificates and were celebrated by the community.

Dates and delivery of scheduled activities: October 2022 to January 2023. All communities benefited from the interventions as planned. Adjustments in delivery times of scheduled activities were made to suit people's availability, as part of the intervention period coincided with the harvest period in rural areas. All communities were apparently receptive and enthusiastic about the project.



Photo: Pledge mothers with badges

12-month reminder campaign: A one-day reminder campaign is scheduled at ~9-12 months post-intervention during Oct-Nov 2023.

All intervention teams will receive a refresher training in Sept-Oct 2023.



Photo: Community hearing about the key behaviours



Photo: Local PI, Prof. Toure and community leaders during a supervisory visit

Sub-studies

We have a number of ongoing sub-studies, developed through small grants. Broadly these are as follows:

1. Understanding and exploring intervention options for reducing household communal handwashing without soap before meals.
2. Exploring microplastics in children's drinking water and stools. This is in collaboration with UoB's Geography department that has led to developing capacity in Mali for microplastics research through a scholarship for a researcher visit to UoB for 5 months, and equipment development in Prof O Koita's laboratory in Mali.

Staff and other project news

- We have been successfully granted a one year no-cost extension, with a new end date of December 2024.
- Prof A Coulibally has joined as our Mali qualitative lead plus his two researchers Mr M Coulibally and Mrs B Binto.
- Dr A Doumbia has also joined our team as research assistant in Mali.
- Dr K Weber has joined as the UK qualitative research fellow. She will be working closely with the Mali qualitative team to complete all related activities.
- A number of short-term staff or interns have joined the project to support us with data analysis, write-up, dissemination of project and logistics activities.

Capacity building

Conferences: Dr Sidibe (Trial Manager) will be attending this year's American Society of Tropical Medicine and Hygiene annual meeting in the US, and Dr Diarra (Lab Research Fellow) attending University of North Carolina (UNC) global WASH conferences to present the findings of Microplastics and Health and communal handwashing RCT, respectively. We have submitted abstracts to the 6th AFEA and 1st SOMEPI conference in Bamako, Mali and are preparing to submit a number of abstracts to upcoming conference early next year.

Training: Mr Traore (Database manager, statistician and health economic PhD student) has attended 3 modules of MPH at University of Birmingham in January-March 2023. The team led by Sue Tebbs are currently preparing to deliver a series of online training on project management, and academic and grant writing.

Training on NVivo is planned for the qualitative team in Mali. Attendance at the forthcoming MPH modules and a bespoke cluster RCT statistics course is planned in the months ahead.

On-job: There is on-going mentorship and learning by all UK and Mali senior, middle and junior grade staff and researchers, as we move through stages of the project.

Next steps

- Training for and delivering the 9-12-month intervention reminder.
- Training for and delivering the 15-months post-intervention evaluation in 2024.
- Complete post-intervention qualitative data collection.
- Cleaning and descriptive analysis of baseline and 4 months evaluation data.
- Publications, conferences and impact-related activities

Website: <https://www.birmingham.ac.uk/research/applied-health/research/maaciwara-study/our-research.aspx> X(formally Twitter): @MaaCiwara
Email project managers: e.a.asamane@bham.ac.uk or c.sidibe@bham.ac.uk Tel: +447835781821 or +223 76 32 96 04

Funders: Medical Research Council (MRC) UK Research and Innovation (UKRI)-Global Challenge Research Fund (GCRF); University of Birmingham (UoB) Institute for Global Innovation and Impact funds; Co-funded in-kind UoB core-funds.

