Evaluation of a Baby WASH Intervention to Reduce Environmental Enteropathy and Impaired Growth in Young Children in Democratic Republic of Congo
Food for the Hungry (FH) is a faith-based NGO founded in 1971. They operate relief and development programs in over 20 countries across Latin America, Africa, and Asia. Their focus is on behavior change programming in health, livelihoods, education, and disaster risk reduction.
FH/ Democratic Republic of Congo

- FH has been assisting vulnerable communities in Eastern DR Congo since refugees first came from Rwanda during the 1994 genocide and has been active in four provinces and 8 territories since 2004.
- FH/DRC activities focused on reducing food insecurity, agricultural and livestock production, health and nutrition, water and sanitation, community capacity building, as well as road and rail rehabilitation.
- FH/DRC works with 68,000 households in South Kivu and Tanganyika.
Tuendelee Pamoja II Development Food Assistance Project

- Five-year funding from October 2017 – September 2022
- Serving 1,427,487 project participants
- Working across food security, livelihoods, health/nutrition and WASH sectors
- With a cross-cutting themes of reducing conflict and incidence of SGBV for community cohesion and development
Refine and Implement Pilot

- Refine and Implement (R&I) is a pilot approach for the development food security activities supported by the Office of Food for Peace (FFP).
- The first year of a five-year award is the refinement phase. During this phase, awardees will refine their activity’s theory of change and interventions in close collaboration with FFP staff, based on the baseline data, community priorities and needs, institutional mapping, assessments and studies, and research that will be conducted during the year.
Environmental Enteropathy and Stunting: A randomized control trial

Purpose of the Study

- **Objective 1**: Identify risk factors for EE and impaired growth among children under two years of age in South Kivu, DRC
- **Objective 2**: Develop a scalable Baby WASH intervention to reduce EE in this pediatric population through formative research
- **Objective 3**: Investigate the effectiveness to develop Baby WASH interventions to: 1) reduce fecal markers in EE; 2) improve child growth; 3) reduce DD; 4) sustain uptake of handwashing with soap, water treatment practices, reductions in child mouthing of contaminated fomites, unsafe child feces disposal, and presence of feces on the HH compound
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Planning Phase: Formative Research (Year 1)

• (1) structured observations of children under two years of age to observe their geophagy practices;
• (2) 30-40 in-depth interviews and 10-12 focus group discussions (FGD) with child caregivers, community health workers, and community leaders to learn about community perceptions related to geophagy;
• (3) development of intervention strategies to intervene upon geophagy behavior in susceptible pediatric populations; and
• (4) a pilot of the development of baby WASH intervention approaches.
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Planning Phase: Prospective Cohort Study (Year 1)

- 350 children six months of age will be recruited and followed prospectively for a period of six months.
- Household visits will be made at baseline and follow-up to collect anthropometric measurements
  - 1) stool sample to assess environmental enteropathy markers,
  - 2) household water quality
  - 3) surfaces where the child plays to quantify E. coli counts.
- Conduct five-hour structured observations of children younger than 23 months along with caregiver questionnaires in order to determine risk factors for EE (HW w/ soap, child feces disposal practices, presence of animals in the HH compound)
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Phase 2: Randomized Control Trial Study Design (Years 2 through 5)

The RCT will be conducted to determine which activities (i.e. play mats or play pens, Baby WASH package) are the most effective strategy in preventing geophagy and decreasing EE.
Care Groups: Behavior Change Strategy

- **Coordinator**: Supports 3-6 Supervisors
- **Supervisors**: Supports 4-6 HNPs
- **HNPs**: Supports 5-6 CGs
- **Care Groups**: Has 10-15 CGVs
- **Care Group Volunteer**: Shares lessons with 10-15 Neighbor Women and their families, known as a Neighbor Group
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Where are we now? Next steps:

- Security Assessment
- Submit IRB application for study at JHU
- Finalize study support staff
- Conduct first field visit
- Determine laboratory logistics
Thank you