



The Safe Start Trial – the design and evaluation of a novel hygiene intervention to reduce early childhood enteric infection and growth faltering”

Jane Mumma
Great Lakes University Kisumu

Kisumu Municipality (Main Areas and Sublocations)

Legend

Main Areas & Sub locations

- Kibera East
- Central Kibera
- South West Kisumu
- North Kisumu
- Central Kisumu
- East Kisumu
- Kapiti West
- Township
- Kapiti East
- West Kibera



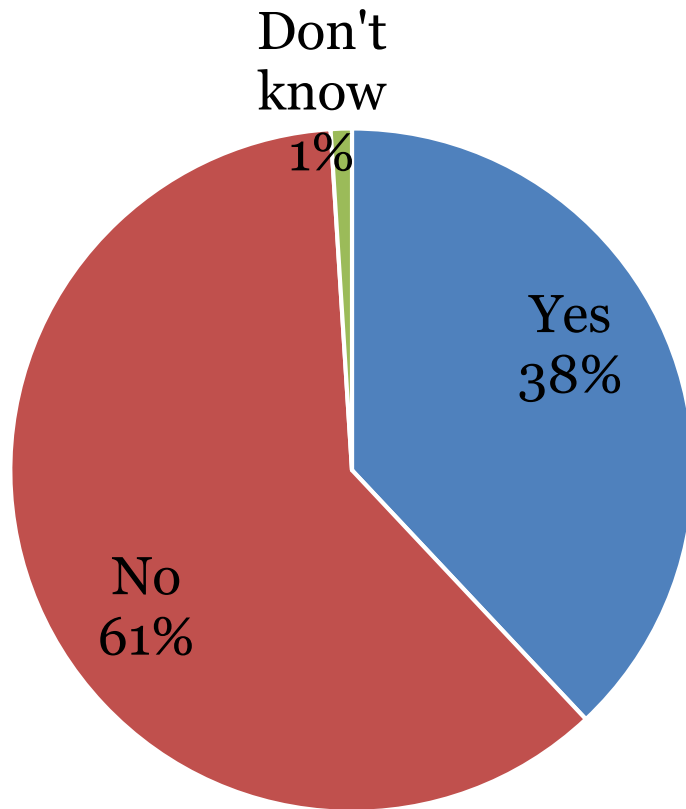
CONTEXT CONT...

- Nyalenda A and Nyalenda B
- Third largest city
- Population a little over 400,000
- Some sources estimate that up to 60% of the city's population reside in these peri-urban communities.

CONTEXT CONT...

- Pre-Intervention Study:
 - Lack of basic sanitation
 - County water points
 - Poor housing, limited infrastructure
 - High density
 - High rates of poverty
- Peri-urban such that some sections are rural

DISEASE BURDEN: DIARRHEA (N=562)



- Population and housing census, 2009 was 38.6 M
- Kisumu City had 409 928 people
- Around 50-60% of Kisumu City is Peri-Urban

HOUSEHOLD FOOD AND DRINKING WATER CONTAMINATION

	CHILD FOOD CONTAMINATION		DRINKING WATER CONTAMINATION	
<i>SITE</i>	PROPORTION %	SE %	PROPORTION %	SE %
OBUNGA	59	4	71	4
NYALENDA A	64	4	54	4
NYALENDA B	56	4	72	4

Objectives for Safe Start

- The aim of this study is to evaluate the effect of a novel child hygiene intervention on child health and development. The specific objectives of the study are to:
 - Design and implement a novel child hygiene intervention targeting caregivers of children at 6 months of age, and delivered by Community Health Volunteers.
 - Measure the effect of the intervention on observed and reported household behaviours
 - Measure the effect of the intervention on fecal contamination in the child environment (food, drinking water and fomites)
 - Evaluate the effect of the intervention on specific enteric infections and growth faltering among children



Formative Research

- **To inform the ‘Safe Start’ intervention**
 - Integrated Behavioral Model for Water, Sanitation, and Hygiene (IBM-WASH; Dreibelbis, R., et al.,)
 - Dialogue Model (Kaseje et al., 2010)
- **Child exposures to fecal pathogens**
 - Data collected by observation
 - (Ngure et al., 2013; Touré, et al., 2011 and 2013)
- **Child care-giving practices**
 - Data collected by observation and
 - In-depth interviews (Ngure et al., 2013)
- **CHV schedules, routines and capacity**
 - CHV schedules, routines, and capacity
 - Data collected through transect walks, in-depth interviews and FGDs



Formative Research

Preliminary Findings:

- Most common caregiver key junctures were:
 - Giving breast (33%)
 - Child feeding (17%)
- Caregiver hand washing habits:
 - before feeding the child (2%)
 - after feeding the child (20%)
 - after cleaning the child (0%)
 - after using the toilet (0%).
- Lack of utensils for feeding the baby and storing the baby's food



Formative Research Findings

CHV schedules, routines and capacity

- High population density in Peri-urban settlements, less HH contacted by CHVs per day
- CHVs are not compensated by the MOH; they take up extra work from non-governmental organizations for basic stipends.
- Inconsistent and inadequate training with regard to behaviour change; they have very limited skills on behaviour change

Testing the intervention through Trial of Improved Practices (TIPs)

Poster 2 SELF ADHESIVE.pdf 1 28/07/2017 19:51

Clean food=Healthy happy baby

Mimi hufanya hivi kila siku.

Chakula Kisafi, mtoto mwenye afya na furaha





Acknowledgements

Collaborators:

GLUK: Sheillah Simiyu and Evalyne Aseyo, et al.

LSHTM: Oliver Cumming, Robert Dreibelbis and Alexandra Czerniewska

University of Iowa: Kelly Baker

Donors:

This work is funded by the UK Department for International Development through the SHARE Research Programme.