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

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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.
• 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

<table>
<thead>
<tr>
<th>SITE</th>
<th>CHILD FOOD CONTAMINATION</th>
<th>DRINKING WATER CONTAMINATION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PROPORTION %</td>
<td>SE %</td>
</tr>
<tr>
<td>OBUNGA</td>
<td>59</td>
<td>4</td>
</tr>
<tr>
<td>NYALENDA A</td>
<td>64</td>
<td>4</td>
</tr>
<tr>
<td>NYALENDA B</td>
<td>56</td>
<td>4</td>
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</tbody>
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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
  – 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
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)
Acknowledgements

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