Does the Girinka Program Improve the Nutrition of Young Children and Can the Impact Be Increased Through Social Behavior Change Communication?

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Study Design

This cluster-randomized controlled cohort study is designed to measure the impacts of participation in (1) the Girinka program plus a community-based animal source food (ASF) social behavior change communication (SBCC) intervention compared to participation in Girinka alone and (2) Girinka alone compared to Girinka eligibility, but no participation. Main outcomes of interest are height-for-age z-score, stunting, minimum dietary diversity, and milk consumption among children 1 – 3 ½ years.

Table 1. Child Anthropometry in Girinka Only Versus Girinka Eligible Households

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<thead>
<tr>
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<th>Girinka only (N=228)</th>
<th>Girinka eligible (N=224)</th>
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<tbody>
<tr>
<td>Height-for-age z-score</td>
<td>-1.61</td>
<td>-2.04**</td>
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<tr>
<td>Weight-for-age z-score</td>
<td>-0.62</td>
<td>-0.91**</td>
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<td>Stunting (HAZ&lt;-2 SD)</td>
<td>37.7%</td>
<td>47.8%</td>
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- **p<0.05, ***p<0.001

- Based on 24-hour recall, minimum dietary diversity (44% both), ASF consumption (48% vs. 44%), and milk consumption (7% vs. 5%) did not differ significantly among Girinka only vs. Girinka eligible children.
- Milk powder in Shisha kibondo accounts for the majority of ASF consumption (48% both), followed by fish and then fresh milk.
- About 85% of Girinka only households boil their milk, but 93% of Girinka eligible mothers were aware of the importance of giving ASFs to young children.
- About 85% of Girinka only households boil their milk, but 93% store it in a plastic container at room temperature.
- Fewer Girinka only than Girinka eligible households had severe food insecurity (63% vs. 70%).

Figure 2. Sample Counseling Card (front and back)

Implications

- Promotion of programs that enhance access of poor households to ASFs, such as Girinka is necessary. Results of this study and others have shown associations between ownership of a cow and reduction in stunting in children.
- Sustainable business models to improve access to other ASFs like fish, in addition to dried and fresh milk.
- Results show lack of knowledge by mothers on the importance of ASFs for child growth and appropriate timing of introduction of ASFs. There is therefore need for investment in SBCC efforts at scale to enhance nutrition gains that can be achieved through ownership of a livestock asset such as a cow.
- "Gabura Amata Mubyeyi" is well accepted by communities and could be scaled to include other ASFs and implemented in other geographical areas.