Sugira Muryango: a Home-Visiting Intervention to Promote Early Childhood Development and Reduce Violence integrated into Rwanda’s Social Protection Program
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SCHOOL OF SOCIAL WORK

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Compound Adversity: Rwanda

Background:
- **11.9 million inhabitants**: ~53% less than 19 yrs old
- **Progress in addressing infant and child mortality**:
  - Under-five mortality stands at 50/1,000, down from 76 in 2010 and 196 in 2000
  - But deficits remain: Ex: **High under-five stunting rates** (38%)
- **Compound adversities**: 1994 genocide, the HIV/AIDS epidemic, extreme poverty

Country challenges:
- Chronic malnutrition (stunting)
  - Rwanda among the highest stunting rates (BDI, ETH, MAD, MWI)
  - Strong negative correlation between income levels and stunting
- Early childhood development
- Neonatal mortality
- Quality of education
- Prevention of violence against children

Country strengths:
- Political stability; Strong governance
- Fiscal and administrative decentralization
- Strong political will (Rwandan National ECD Policy Goal, Economic Development and Poverty Reduction Strategy: EDPRS-II)
Stunting in Rwanda (rough indicator of overall ECD) is high

- 30 SSA countries with ~recent DHS
- Rwanda among the highest stunting rates (BDI, ETH, MAD, MWI)
- Strong negative correlation between income levels and stunting
Sample $N = 884$ caregiver-child pairs

Pre-intervention assessment to inform targeted roll-out of National ECD Policy

Focus: household characteristics, caregiver characteristics, caregiving practices, child development, and nutrition/health
Caregiving practices in Rwanda

Children 0–11 months old exposed to any violent discipline: 19.8%

Children 24–35 months old exposed to any violent discipline: 80.7%

Caregivers who believe physical punishment is necessary to raise a child well: 34.4%

Early Childhood Development and Family Services: Baseline Evaluation in 20 Sites in Rwanda
UNICEF, RWANDA, 2014
Family-based promotion of mental health in children affected by HIV: a pilot randomized controlled trial

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THE LANCET
Global Health

Integration of prevention of violence against children and early child development

Despite important scientific advances in how violence against children can disrupt healthy early development, 1 the study of these issues has developed in relative isolation. Both areas are increasing in prominence, 2, 3 but so far there has been little call for their integration, despite the important connections between them. Without close integration, scarce resources are at risk of being allocated inefficiently. 4

Large-scale roll-out of programmes on early child development and prevention of violence against children are often within the same sectors, stakeholders, and professional groups. For instance, the health, social, educational, and child protection sectors are likely to be included, often training health-care providers, social service personnel, and educators who contribute to child well-being. However, the two areas remain largely separate.

Mikton, C., MacMillan, H., Dua, T., & Betancourt, T. S.
Sugira Muryango targets families in extreme poverty with young children (6-36 months)

Support **responsive parenting** to **promote ECD & prevent violence** through **active coaching** and **father engagement**

**Characteristics:**

- **In-home coaching**
- **Standard content** on early stimulation, health, nutrition, hygiene (WHO & UNICEF Care for Child Development)
- BUT ALSO: problem solving, conflict resolution, stress management
- **Navigation** of formal/non-formal resources & supports
- **Flexible** for all **family types**
- **Father engagement** emphasized in timing, visuals and messaging
- **Complementary** to ECD Centers, community sensitization and home-based child care initiatives
Sugira Muryango Conceptual Model

Target beneficiaries

Poor families with children ages 6-36 months enrolled in Rwanda’s Social Protection Programs

Risk Factors

Misinformation about Children’s Development Needs
Limited Stimulation & Learning Opportunities
Lack of Future Orientation and Planning
Family Social and Economic Stress
Risk of Violence

Sugira Muryango Components

Active Coaching and Learning on Nutrition, Health, Hygiene
Coaching in Early Stimulation and Responsive Parenting
Building Resilience and Coping Skills Including a Family Narrative
Building Problem-Solving Skills and Resource Navigation
Parent emotion and conflict resolution regulation strategies

3 months Outcomes

Improved Parenting Practices
Improved Health-related Caregiver Behaviors
Reduced Violence

12 months Outcomes

Improved Physical and Cognitive Child Development
With a United Family Anything is Possible
Play and taking pleasure in parent-child interactions is emphasized.
Toys made by families and Sugira Muryango community workers
Rubavu District May 2018
Fidelity Monitoring: Rwanda

CBVs audio tape the intervention as it is delivered in the home.

A “Super CBV” oversees weekly group supervision and uploads the audio onto Dropbox.

CBV uses constructive feedback to refine intervention implementation.

Expert supervisor develops agenda for targeted, supportive supervision with CBV.

Expert supervisor uses fidelity guide to listen to random sections of the session.
Baseline Enrollment for Cluster Randomized Trial (N=1049 families)

Clusters were excluded if they had <5 CPW or <1 EPW households.

Randomization was conducted by strata of sector, which did not guarantee equal numbers of intervention and control clusters.
Sugira Muryango Preliminary Results

**PILOT 1**
- Pre-post design (no comparison group)
- Delivered by bachelor’s degree level interventionist
- 20 households, 22 children

**PILOT 2**
- Pre-post design (randomized comparison group)
- Delivered by lay community workers
- 38 households, 39 children

**Cluster Randomized Trial (CRT)**
- Pre-, post-, 12-month follow-up design (randomized comparison group)
- Delivered by lay community workers
- 1049 households in CRT trial

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**Key Findings CRT: Child outcomes**
- More stimulation in the home
  - Higher scores on the the HOME inventory (Cohen’s d =0.78) and OMCI (Cohen’s d=0.29)
  - Increase of 1.2 playful activities during the last 3 days (Cohen’s d = 0.71)
  - Dietary Diversity: Consumption of 0.44 extra food groups in last 24 hrs. (Cohen’s d=0.34)

**Key Findings CRT: Family environment**
- Decrease in child exposure to violent child discipline (OR:0·34, 95% CI:0·22, 0·51)
- Increase in child exposure to non-violent discipline (OR:1·9, 95% CI:1·3, 3·0).
- Reduced victimization to intimate partner violence among mothers (OR: 0.52 (95% CI: 0.24, 1.10)
- Decrease in mothers & fathers meeting clinical criteria for depression/anxiety (OR: 0.82 (95% CI: 0.67, 0.94)

**Need for prevention**
- More stimulation in the home
  - Higher scores on the the HOME inventory (Cohen’s d =0.78) and OMCI (Cohen’s d=0.29)
  - Increase of 1.2 playful activities during the last 3 days (Cohen’s d = 0.71)
  - Dietary Diversity: Consumption of 0.44 extra food groups in last 24 hrs. (Cohen’s d=0.34)

**Transition to Scale with Local Gov’t**
- Increased care seeking for diarrhea (OR: 2.2 (95% CI: 1.5, 3.1)
- Increased care seeking for fever (OR:3·3, 95% CI:2·3, 4·8).

HOME: Home Observation for Measurement of the Environment
OMCI: Observation of Mother-Child Interaction
Implementation Strategy: Collaborative Team Approach
Collaborative Team is a Multi-Level STRATEGY

- **CTA approach** will **transition the Sugira Muryango evidence-based practice to the child protection (IZU) workforce** in collaboration with the VUP and a strong network of **government and local leaders, civil society and NGOs**:
  - NCC and NECDP officials
  - IZUs
  - FXB Rwanda (implementation partner capacitating IZUs)
  - civil society/women’s and men’s associations
  - community health centers
  - local leaders

- **Shift ownership** to local partners
- **Cross-site learning** and plan-do-study-act cycles (PDSAs)
- **Cross-Site Seed Team** which becomes a lasting hub for training and supervision
Rwanda Collaborative Team Approach & Seed Team Structure (Adapted from Aarons & Hurlburt)

- **Government of Rwanda, National Child Commission (ECD/Social Protection Policy, National VUP program)**
- **CTA launch support from Foundations, USAID, World Bank?**
- **Intervention Developers & Academic Partners (RPCA/Boston College)**
  - Recruit & Train interventionists
  - Oversee Fidelity Monitoring
  - Conduct supportive supervision
  - Conduct Quality Assurance and Quality Control Checks
- **Seed Team**
- **Nyanza site and CTA members**
- **Rubavu site and CTA members**
- **Ngoma site and CTA members**
Exploration, Preparation, Implementation, Sustainment (EPIS) Framework

**OUTER CONTEXT**
- Leadership
- Service Environment/Policies
- Funding/Contracting
- Inter-organizational environment and networks
- Patients/client characteristics
- Patients/client advocacy

**INNER CONTEXT**
- Leadership
- Organizational characteristics
- Quality and fidelity monitoring/support
- Organizational staffing processes
- Individual characteristics

**BRIDGING FACTORS**
- Community academic partnerships
- Parveyors/Intermediaries

**INNOVATION FACTORS**
- Innovation/EBP fits: system, organization, provider, patient/client
- Innovation/EBP developers
- Innovation/EBP characteristics

**EXPLORATION**

**IMPLEMENTATION**

**PREPARATION**

**SUSTAINMENT**

Inter-connections
Interactions-Linkages-Relationships
### Transition to Scale: Using Collaborative Team Approach Proposed 3-part Solution

#### Collaborative Team Approach (CTA)
- To scale Sugira Muryango in Nyanza, Ngoma and Rubavu Districts
  - Reach: **9,587 Ubudehe 1 households**
  - Advance developmental potential and school readiness of **9,967 children** ages 0 to 36 months
  - Provide parenting education to **14,380 caregivers**
  - Train **2,592 community based interventionists** in the Sugira Muryango intervention to promote ECD and reduce violence.

#### Enhanced technology
- To support the CTA
  - Improve communication and collaboration
  - Strengthen CTA’s ability to identify and target the most vulnerable families needing higher-level support.

#### Dissemination & Engagement Plan
- Share research findings with local stakeholders and global scientific community
  - Ongoing dissemination events with government and community stakeholders
    - Academic meetings
    - Regional and National Conferences
## Estimated Cost of Sugira Muryango Scale Up

<table>
<thead>
<tr>
<th></th>
<th>As implemented (CRT)</th>
<th>As an INGO program (PLAY Collaborative Model)</th>
<th>As a NGO program (Goal for Post-Grant Sustainability)</th>
<th>Government Program (Goal for Post-Grant Sustainability)</th>
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</thead>
<tbody>
<tr>
<td>Cost per family</td>
<td>$456</td>
<td>$313</td>
<td>$200</td>
<td>&lt;$200</td>
</tr>
<tr>
<td>Cost per session</td>
<td>$38</td>
<td>$26</td>
<td>$17</td>
<td>&lt;$17</td>
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Initial calculations are within the range of similar LMIC home visiting programs.


Core Issues

- Lots of **emerging evidence-based models** but **implementation research** is needed on a range of key questions.
- Workforce **emphasis on lay workers in LMICs** requires **attention ensuring and sustaining quality**: What strategies work?
- What are **sustainable incentives, training and supervision structures** as services transition to scale? What can be sustained by local stakeholders and with **what tools**?
- Opportunities: explore **alternative delivery platforms for interventions**:
  - Nutrition, health & social protection/poverty reduction programs
- **Policy and financial structures** to support transition to scale—what works?
- **Evidence on cost and return on investment (ROI)** that is digestable to policy makers
- **Partnerships** and **building local capacity** to achieve impact
Thank you!
The Strategy for Reaching the Hard to Reach: Integration with Cash for work programs

**Sugira Muryango (SM)**

An evidence based home-visiting intervention to promote ECD and prevent violence with active coaching and father engagement

**The goal:**
- support responsive parenting
- promote ECD
- prevent violence

**The win:** linking with the VUP allows SM to:
- identify and recruit families
- find shared vision with govt
- link to referrals networks
- think of sustainability plans and human resources

**Vision 2020 Umurenge Programme (VUP)**

Rwanda’s *flagship social protection program* for vulnerable families

**The goal:**
- reduce extreme poverty
- promote gender equality
- increase attention to social safety nets

**The win:** linking with SM allows VUP to:
- support to *most vulnerable* families
- **build capacity of community-based workers** (IZJs) through training, monitoring and supervision
- **Generate data**, evaluate implementation impact, implementation process, and clinical impact