

**Acceptability and feasibility of a comprehensive, community-based, multi-component intervention on early childhood development, adherence and retention in pediatric HIV care and treatment programs in Zimbabwe.**

**Presentation by Rudo Chingono  
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The  trial



**C**hild **H**ealth **I**nterventions for **D**evelopment **O**utcomes

# Investigators

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# Collaborative Project

- World Education Inc. Zimbabwe
- University College London
- CeSHHAR Zimbabwe
- Mavambo Trust
- London School of Hygiene and Tropical Medicine
- Stellenbosch University
- Oxford University
- Funded by USAID OVC Special Initiative



# Rationale for the Study

- Studies on children infected and affected by HIV show poorer child development outcomes in these children than on uninfected and unaffected children (Lowick 2012; Sherr, 2014; Filteau, 2009).
- We are testing a multi-component intervention designed to improve these development outcomes

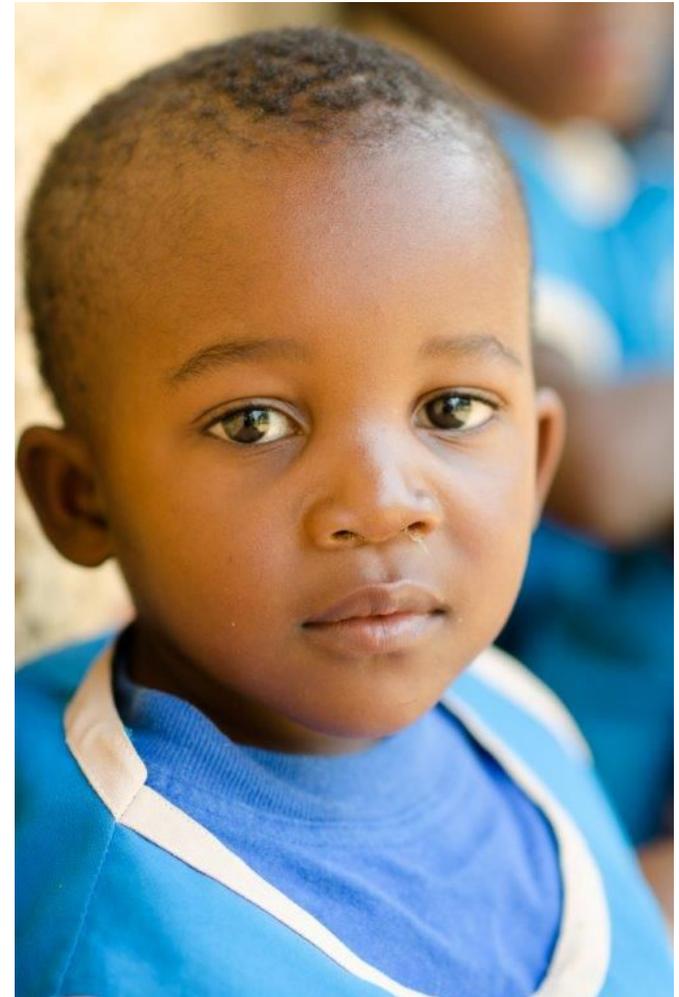
# Setting

- Zimbabwe has 14 million people
- 890,000 orphans
- 2012 Census estimated that 72% living below 'poverty line'
- 27.8% under 5's moderate and severe stunting
- 11.2% under 5's moderate or severe underweight
- Estimated that 1.4 million people living with HIV including 170,000 children (0-14 years)
- Uptake of ART among children suboptimal
- Option B+ rollout from Nov 2013



# Aim of Intervention

- i) Improve early childhood stimulation through developing parenting skills
- ii) Increase economic resilience by strengthening household income and food security
- iii) Improve HIV retention and care outcomes
  - a) among HIV exposed and infected infants
  - b) among HIV+ve mothers



# Study design

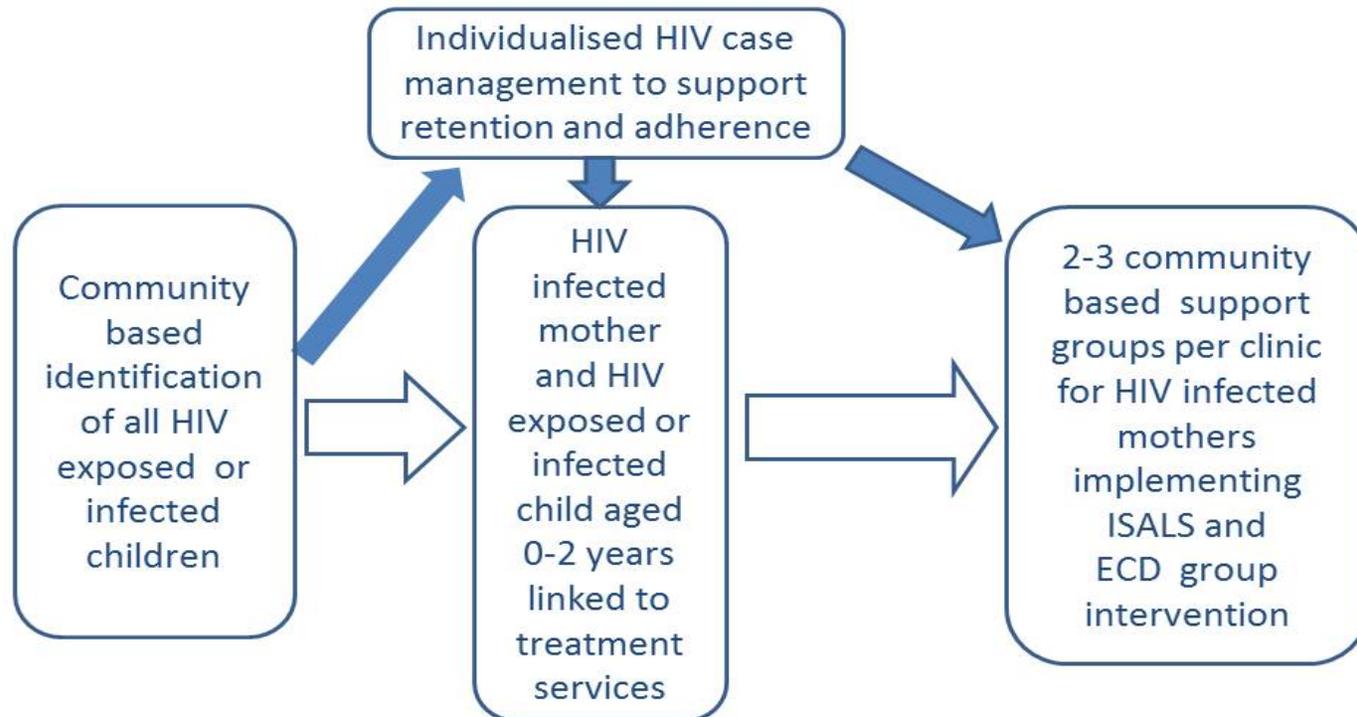
- A cluster RCT that aims to determine the impact of the intervention on child development and HIV outcomes.
- Target population
  - Mother baby dyads
  - HIV infected mothers and their HIV exposed infants (0-24 months)
- Formative work including pilot implementation data

# Aims of pilot study

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- **To assess acceptability and feasibility of the intervention.**
- To assess feasibility and appropriateness of the trial design
- To determine the sample size of the main study
- To pilot the administration of the Mullen Scales of Early Learning in Zimbabwe
- To establish the mean global score and the variability in the mean global score within and between clusters in Zimbabwe.

# Intervention schema



# Intervention design

- 3 Component Intervention:
    - i) 12 Session Early Childhood Stimulation (**ECS**) Course {each 1.5 hrs}
    - ii) Internal Savings and Lending Scheme (**ISALS**) {average group size = 10; held after every ECS session, for 30minutes}'
    - iii) Case care management {home visits conducted monthly, by village health workers}
- + MoHCC standard of care.

# Early Childhood Stimulation Parenting Topics

1. Relationships with people around caregiver and child - social support and accessing services.
2. The role of a good parent-responsive parenting practices.
3. A healthy infant and young child.
4. A well-nourished baby and young child (pregnancy and infancy).
5. Child development – overview.
6. Physical/motor development.
7. Social and emotional development.
8. A healthy infant and young child (focus on PMTCT and treatment adherence).
9. A well-nourished baby and young child – (complementary feeding, hygiene).
10. Communication and language development.
11. Developing thinking and understanding of the world (cognitive).
12. Positive discipline.

# Pilot study

- Goromonzi – population 185,146
- 25 clinics and 2 hospitals
- Pilot study aimed at recruiting 5 groups around Makumbe hospital
- Conducted between August - November 2015



# Methodology

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- 5 clusters with 10 mother child dyads in each cluster
- Purposively allocated to 1 of the 5 ECS/ISAL groups
- Limited self selection into ISALS groups
- 18 qualitative interviews
  - mothers (10)
  - community based trainers (2)
  - village health workers (3)
  - ECS facilitators (3).
- Random observations of ECS & ISALS sessions



# Results

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- Recruited 51 women-infant dyads (out of 54 sensitised -94%)
- Recruited to 5 groups
- 1 group – met monthly
- 2 groups – met fortnightly
- 2 groups – met weekly

# Frequency of the ECS sessions

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- 4 groups that met weekly and fortnightly had;
  - high attendance
  - high levels of morale and group unity.
- Increased session frequency = greater commitment
- In the monthly group however absenteeism was high
- Mothers in the monthly group did not remember the preceding sessions

# ECS session content

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- All the 12 sessions were perceived to be relevant and appropriate
- Easy to understand and apply in daily life
  - The only problem observed was that the stipulated 1 & a half hours was not sufficient to cover all the material in detail
  - Some items had to be rushed, with reduced opportunity for intense discussion and practice

# Facilitator's Skill

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- 3 ECS facilitators were recruited
- 2 were very good and possessed the necessary skills needed to deliver the sessions.
  - They were energetic, organized, confident & well versed with the content.
- 1 facilitator lacked confidence and was less skilled despite attempts at providing her with increased support

# ISALS implementation

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- Mixed responses
  - Mothers were happy to be allocated to groups
  - Mothers in functional groups were happy and appreciated ISALS
  - Contributions ranged from \$2-\$5 per month
  - ISALS resulted in increased financial security (eg from \$18 loan to a +\$200 profit in 3 months)
  - Others however, expressed difficulties raising funds for ISALS start up
    - 2 groups received start up capital as a result

# Case Management review

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- Mothers embraced home visits from VHWs
- Some suggested setting appointments as opposed to random visits
- There was a case of a VHW disclosing status of participant

# Findings

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- The study is feasible and has been highly accepted in the pilot communities.
- Mother reported that the intervention was bringing about positive change
- They were able to learn new skills and enhance existing parenting skills eg:
  - Feeding practices skills (effects of not exclusively breastfeeding)
  - On attending to the child's need for affection

# Recommendations

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- Highly feasible & acceptable therefore it should be implemented
- Fortnightly sessions
- ECS session content was shortened resulting in 18 sessions created
- Maximum number of dyads in a group should be 12
- Train more facilitators than required + careful monitoring of session delivery
- ISALS should be included in intervention but with a provision to provide start up funds in circumstances of dire poverty
- Home visits should be scheduled
  - (confidentiality oaths created for VHWs)



# Research implementation

- Recruitment processes and data collection instruments and procedures were piloted

Moving forward

# OVERALL RESEARCH DESIGN

Identify 30 clusters – 20 in Goromonzi and 10 in Mudzi



Random allocation of 15 clusters to early or deferred intervention arms  
18 clusters with 24 participants and 12 clusters with 12 participants



Eligible mother infant dyads identified through 'Exposed Infant register' maintained by each clinic. Rolled out to pairs of clusters with one pair initiated every two weeks



## Deferred intervention sites

### Usual MoH clinical care

12 or 24 HIV +ve and exposed children aged 0-2 yr enrolled into trial per site and assessed for trial outcomes at 0 and 12 months

Program data collection  
Process Evaluation



## Immediate Intervention sites

### Usual care plus group combination intervention (ECD, ISALS + Case Mgt)

12 or 24 HIV +ve and exposed children 0-2 yr enrolled into trial per site and assessed for trial outcomes at 0 and 12 months

# In summary

- We developed and piloted a community based intervention aimed to address the needs of HIV exposed women and their babies in rural Zimbabwe
- Pilot data suggests that the intervention is acceptable and feasible
- Currently a trial to determine impact is underway.



**THANK YOU  
TATENDA  
SIYABONGA**

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