Bantwana
WORLD EDUCATION
INITIATIVE

RESEARCH BRIEF

Child Health Interventions for Development (CHIDO) Randomized Control Trial Study

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Implementing and Research Partners:

World Education/Bantwana Initiative
Mavambo Zimbabwe
CeSHHAR Zimbabwe

The study protocol was subjected to review and approval by institutional review boards at all participating institutions, including those in Zimbabwe (the Medical Research Council of Zimbabwe and the Research Council of Zimbabwe), University College London, London School of Hygiene and Tropical Medicine and University of Stellenbosch and Oxford.

CHIDO RCT

AIM

To evaluate the effectiveness of a comprehensive, community based, multi-component intervention on early childhood development and adherence and retention in paediatric HIV care and treatment. The multi-component intervention comprised early childhood stimulation and parenting lessons, household economic resilience training, and community case management.

BACKGROUND

Between 2008 and 2010, Zimbabwe experienced an economic and infrastructure collapse, which caused an unprecedented rise in inflation, soaring unemployment rates, political instability and severe drought. This led to **shattered livelihoods for 72% of the population** and a collapse of the health system. Due to the collapse, there was a **shortage of healthcare workers and essential drugs** while the **HIV/AIDS epidemic** affected many Zimbabweans.

The country continues to have **over 2,500 new paediatric HIV infections per year despite significant PMTCT gains**. HIV affects infected or exposed children's health, cognitive development, emotional adjustment and their long-term economic resilience. These adverse outcomes have **long-term effects** on the lives of these affected children and prevent them from reaching their full potential. Additionally, HIV compounds the effects of other ills such as malnutrition. **A child under 5 is particularly sensitive to adverse effects**, making this a very important period in which to address the **critical needs** of vulnerable children and their caregivers. The early childhood period is important as it sets the tone for future development and socialization.

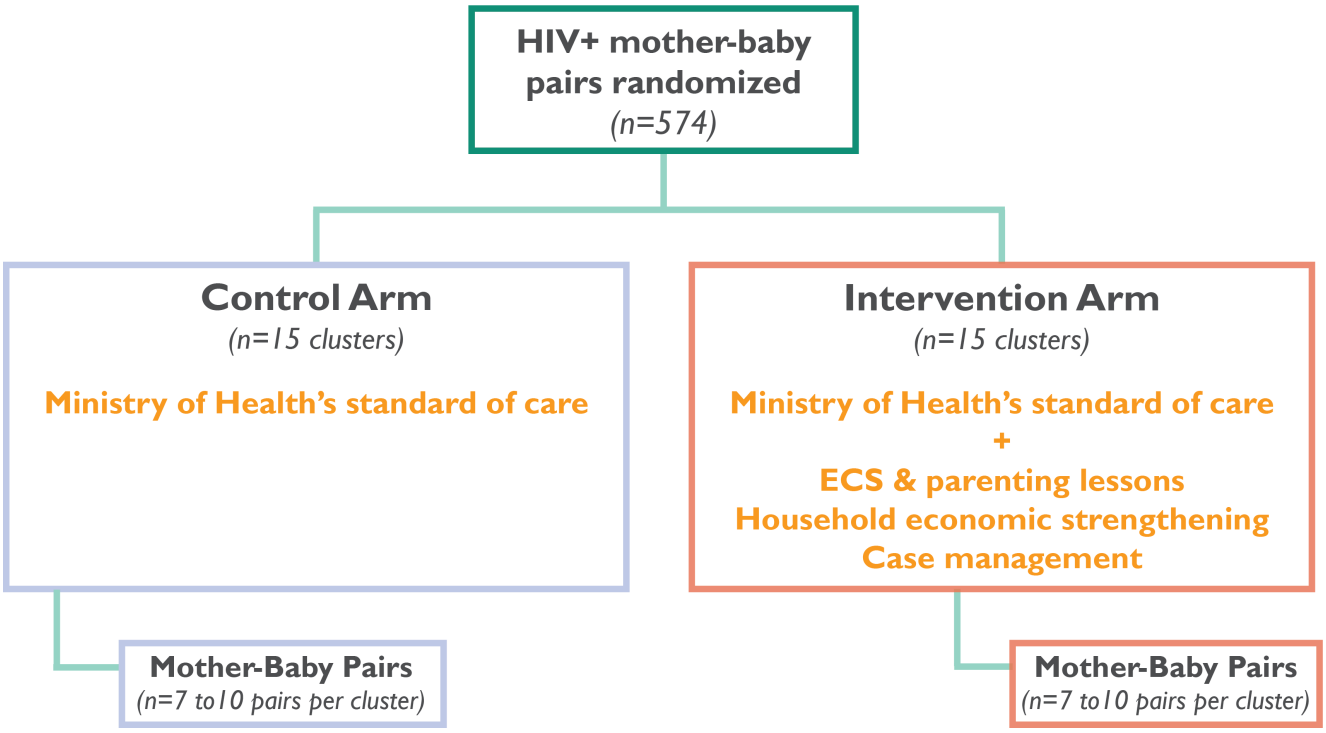
STUDY DESIGN

TIMELINE		
BASELINE January 2016	IMPLEMENTATION May 2016 - November 2017	ENDLINE December 2017

The Child Health Interventions for Development Study (CHIDO) adopted a cluster randomised control trial (RCT) design. Over a two year period, 574 mothers living with HIV and their children under 2 years of age were recruited into 30 clusters with between 7-10 mother/baby pairs per group.

Fifteen clusters were randomly allocated to the control arm where they received the Ministry of Health's standard of care - routine visits to health facilities, ART care, and adherence follow-up by clinic nurses for a 12 month monitoring and follow up period,

The other fifteen clusters were allocated the other intervention arm and received the Ministry of Health's standard of care as well as: 1) early childhood stimulation and parenting lessons, 2) household economic strengthening training, and 3) case management by community case workers.



DATA COLLECTION & ANALYSIS

QUANTITATIVE

An interviewer administered questionnaire was used to record demographic characteristics, income and expenditure, food security, child health care, infant feeding practices, maternal mental health, parental stress, HIV testing, disclosure and treatment history and ART adherence.

Child development assessments were done using the Mullen Scales of Early Learning.

Biomedical assessment of ART adherence through viral load assays and HIV status determination were also done for all participants.

Regression analysis to compare the variation of study outcomes between control and intervention participants.

QUALITATIVE

Semi-structured interviews with health care staff and other key informants (program staff initiating RCT) at intervention clinics were conducted to elicit their perceptions and experience with the intervention package.

In-depth interviews with purposely selected (those who attended all interventions and those who had challenges) caregivers were also conducted at baseline, mid-implementation, endline in both intervention and control sites.

Review of programme monitoring documents formed part of the process evaluation activities.

Thematic analysis of information from health care staff, interview with key informants and caregivers.

STUDY OUTCOMES

Themes include: child development, retention in care (paediatric and maternal HIV care), viral suppression in HIV infected children and caregivers, child nutrition, adherence of ART and prophylaxis, maternal mental health, household food security, and household economic resilience

Results expected July 2018.