



Addressing Maternal Mental Health to Promote Early Childhood Development in Kenya and Tanzania

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Perinatal Depression in LMIC

- Major depression is a leading cause of disability worldwide.
- Perinatal depression is estimated to be two-to-three times higher in low- and middle-income countries versus high-income countries.³
- Thrive I evaluation indicated high rates of maternal depression.

1 in 4 antepartum women in LMIC³



1 in 5 postpartum women in LMIC³



Negative Consequences of Perinatal Depression

- Mothers' health and well-being
 - Birth complications
 - Decreased maternal self-efficacy
 - Breastfeeding problems
- Early childhood development
 - Cognitive and language delays
 - Stunting
 - Increased risk for psychopathology
- Mother-infant interaction



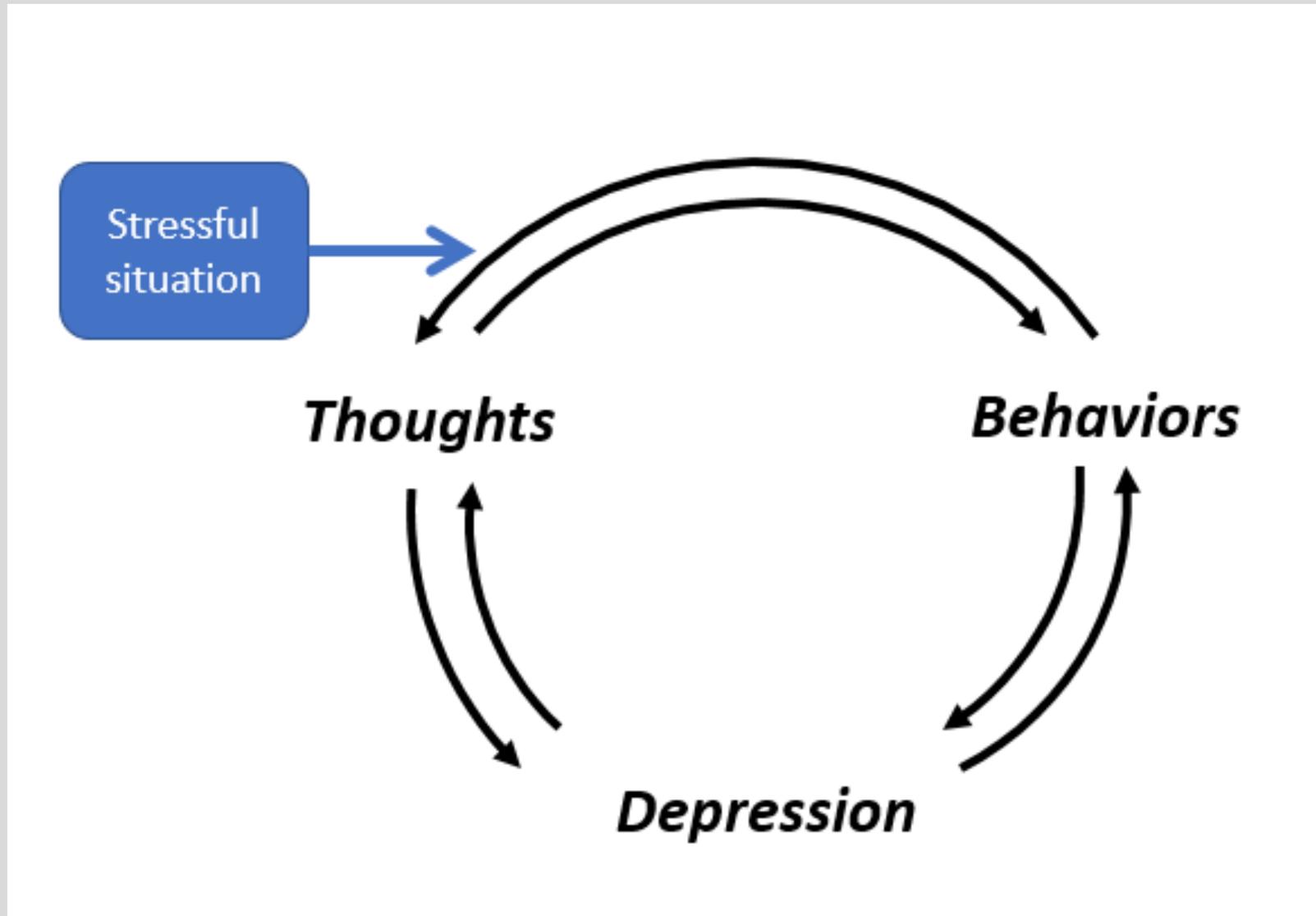
Lancet 2014



The Mothers and Babies Course

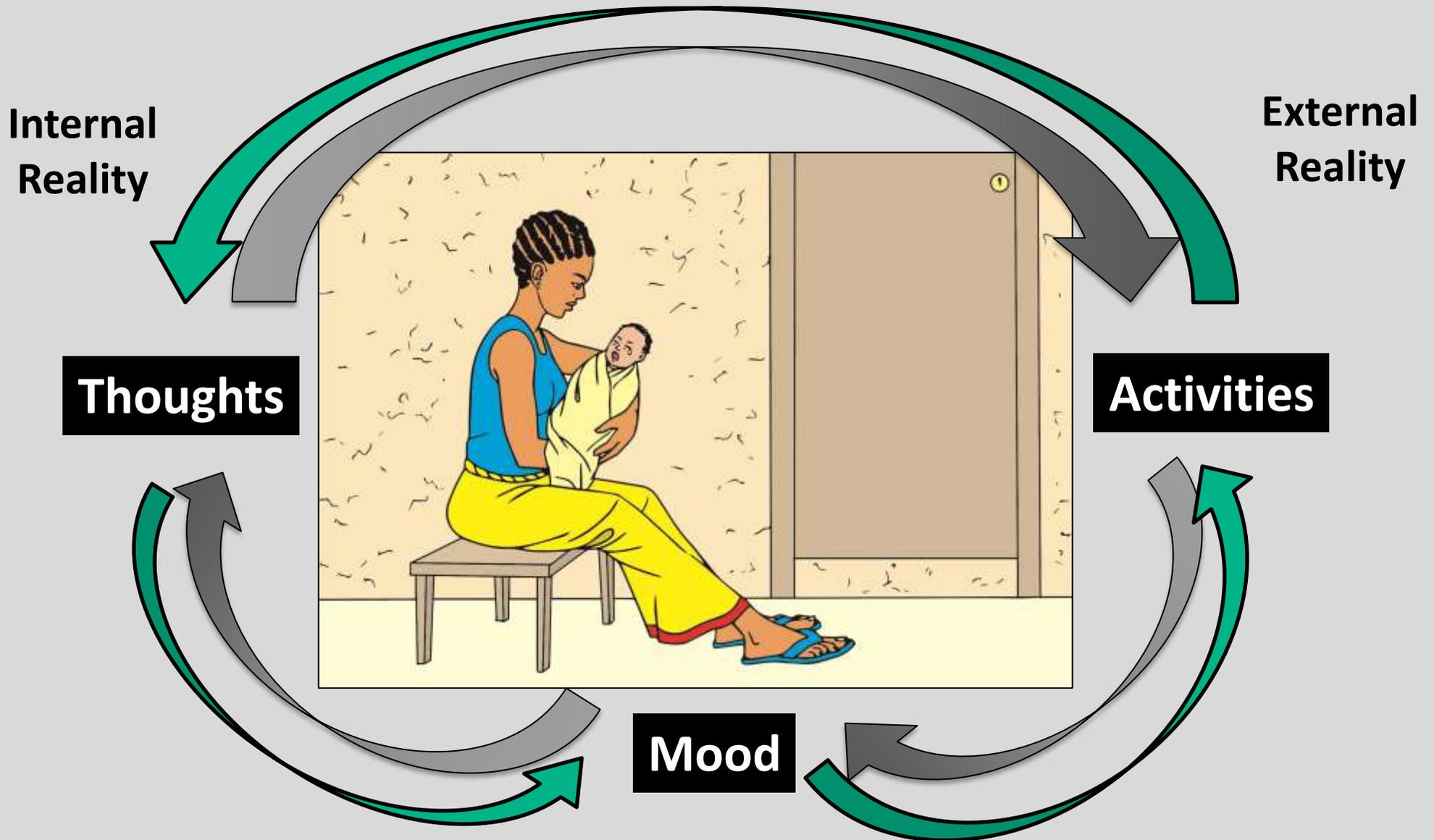
- Prevention model based on cognitive behavioral therapy
- Goal: Reduce the onset of major depressive episodes by teaching women mood regulation skills and education regarding parenting and child development
- Group-based intervention with follow-up home visits
- Piloted in Kenya and Tanzania

COGNITIVE BEHAVIORAL THEORY



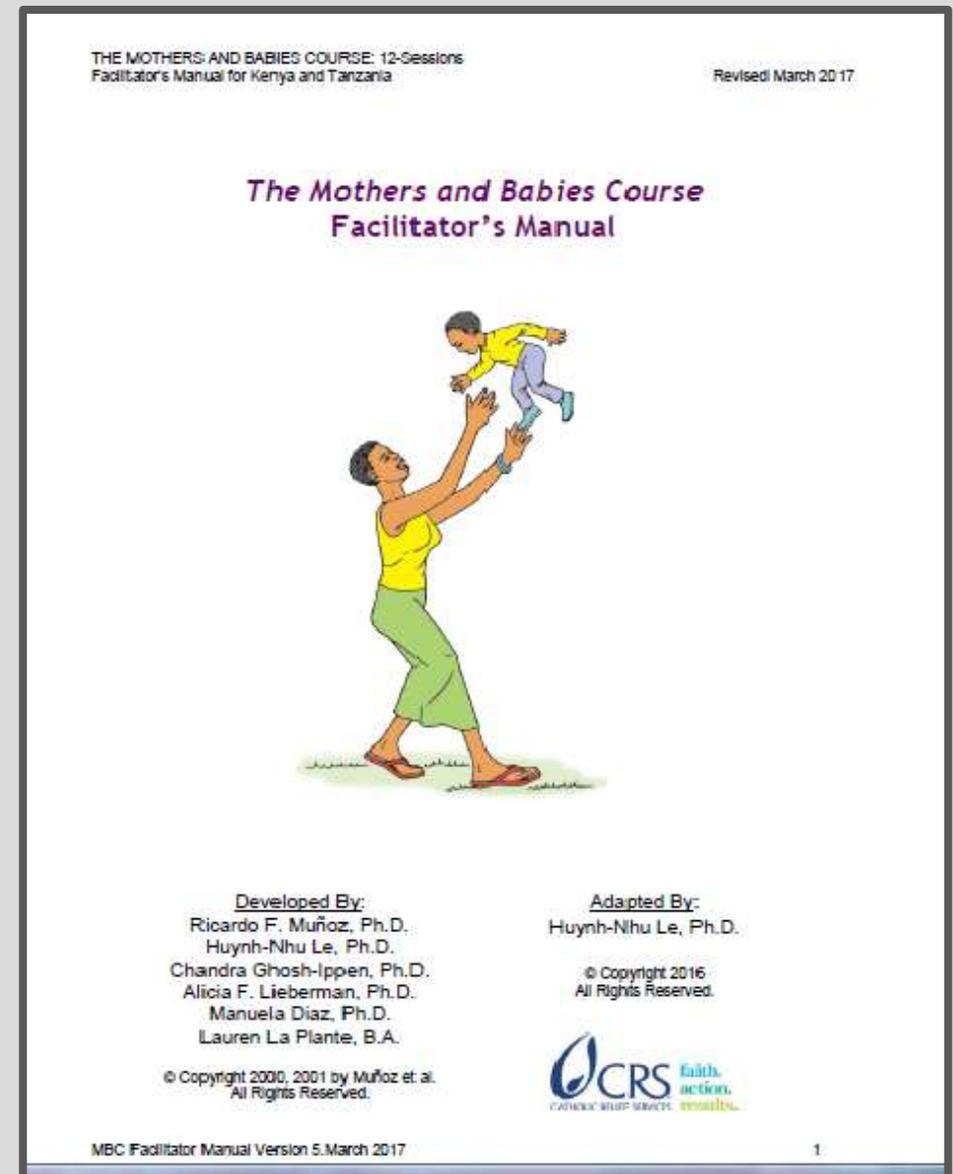
MOOD AND YOUR PERSONAL REALITY

MY PERSONAL REALITY



The Mothers and Babies Course: Adaptation for Kenya and Tanzania

- Added into the Thrive II ECD project
- MBC delivered in community groups of pregnant and lactating women
- 12 group sessions (biweekly)
- Home visits (monthly)
- Facilitated by counselors, alongside lead mothers who facilitate the ECD



Graduation



Objectives

- To assess the impact of MBC on maternal mental health and ECD behaviors in the context of a community-based ECD project in Tanzania

Outcomes of Interest

- Maternal depression and anxiety (Hopkins Symptoms Checklist)
- Child stimulation behaviors -MICS

Populations

- Pregnant and lactating women and children <2

Ethical Review

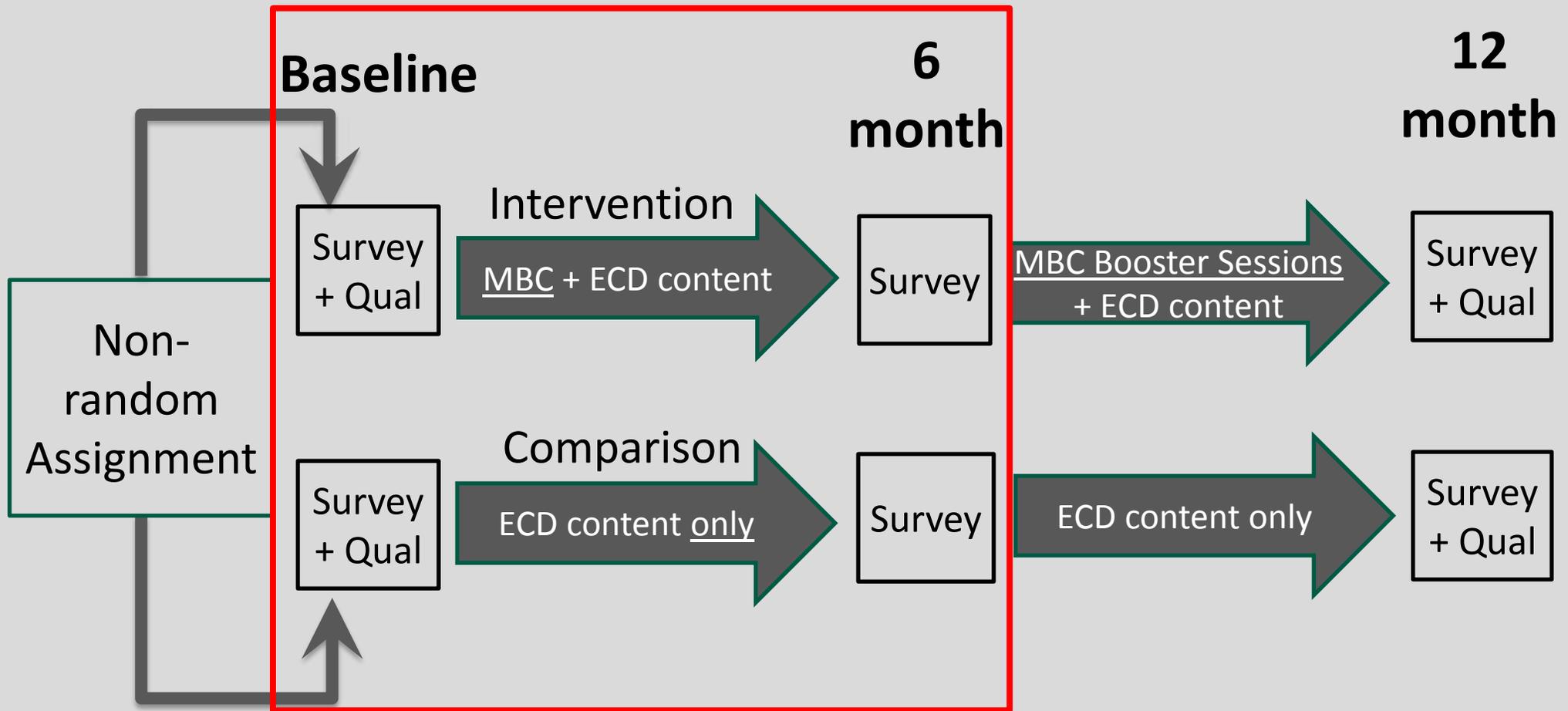
- Nat'l Institute of Med. Research
- CUHAS Research & Ethical Comm.



Evaluation
Methodology

Evaluation Design

- Quasi-experimental: Non-equivalent control groups
- All pregnant and lactating women invited to enroll



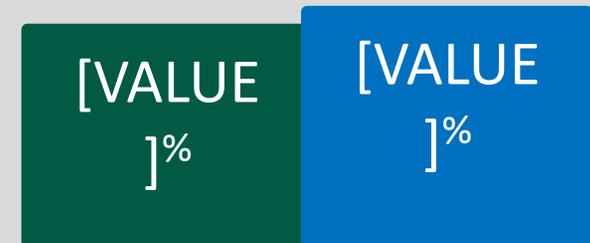
Results (1)

Socio-demographics at Baseline

No differences between intervention and comparison areas for:

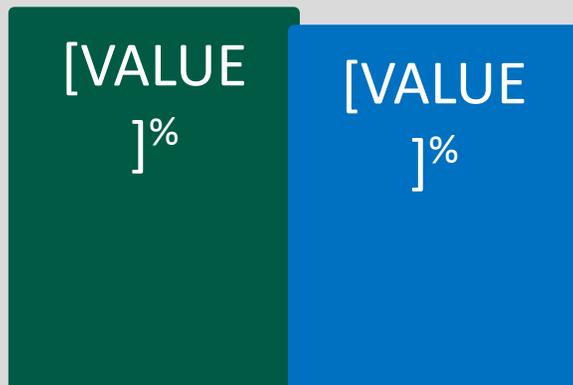
- Maternal age
- Maternal level of education
- Number of children in household
- Employment status
- Marital status

Depression at Baseline



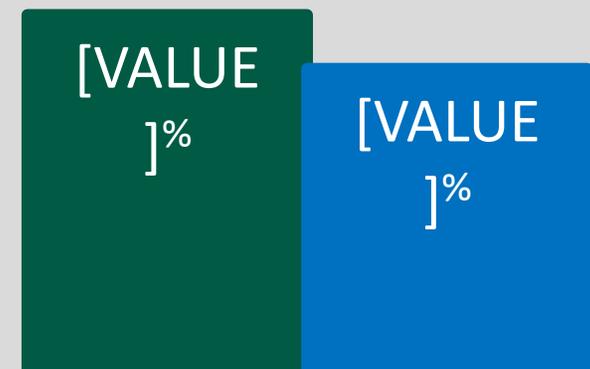
■ Intervention ■ Comparison

Early Stimulation at Baseline



■ Intervention ■ Comparison

Anxiety at Baseline

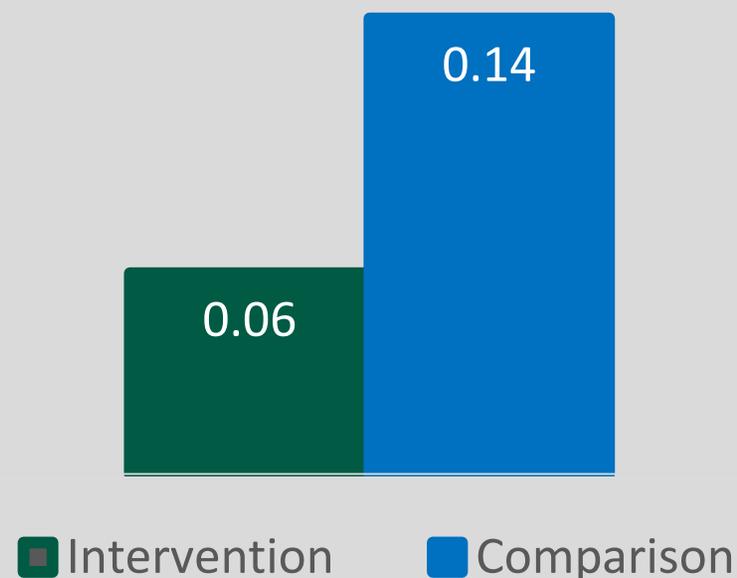
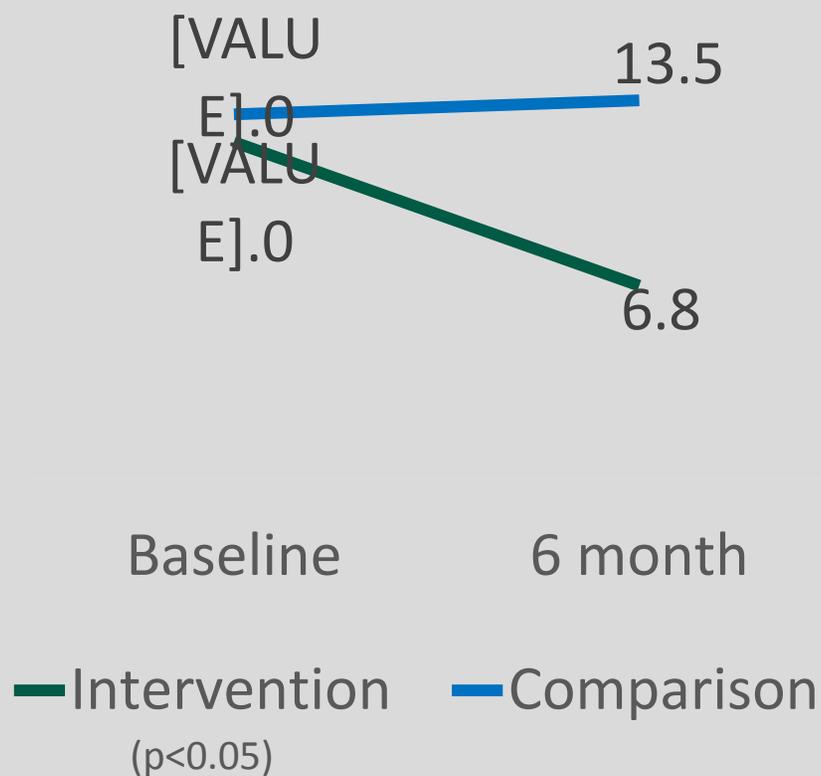


■ Intervention ■ Comparison

Results (2)

Change in Prevalence of Depression from Baseline to 6 Month, by area

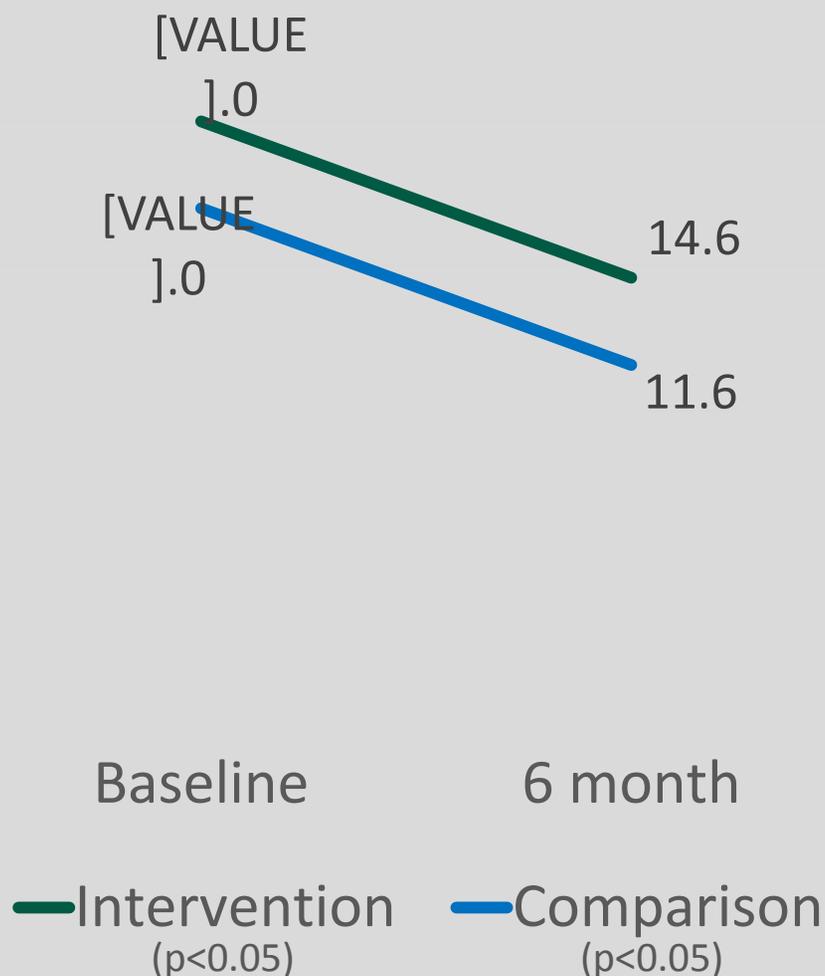
Adjusted Predicted Probability[^] for Depression at 6 Months (p<0.05)



[^]Controlled for depression at baseline, maternal education, marital status, maternal employment status, maternal health, child age, physical IPV, perceived social support

Results (3)

Change in Anxiety from Baseline to 6 Month Follow-up, by Area

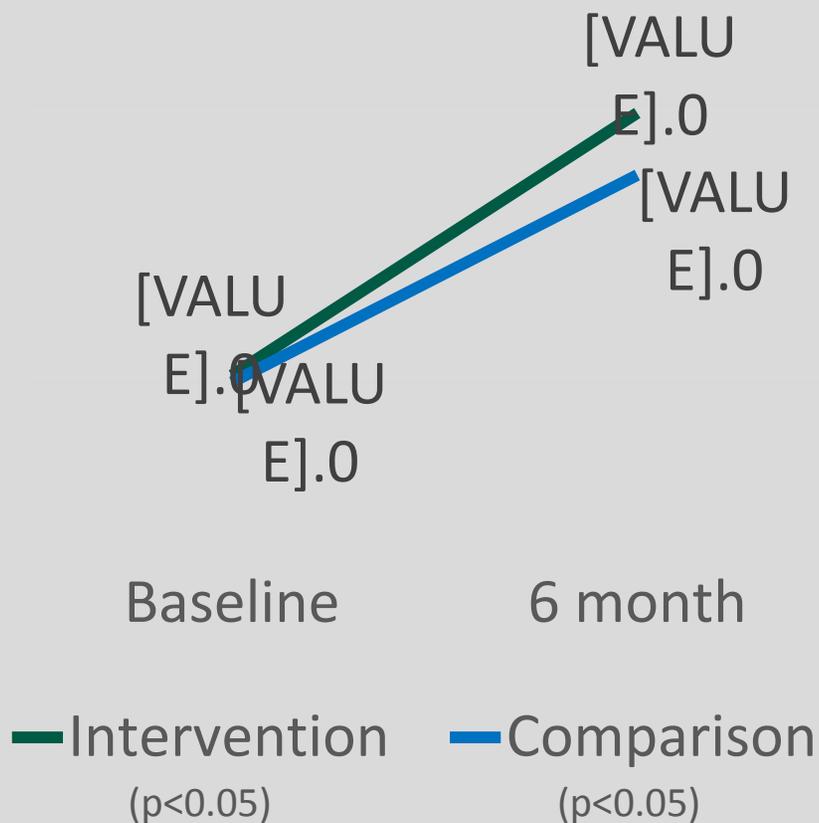


Multivariate model[^] showed no statistically significant difference in symptoms of anxiety at 6 month follow-up between intervention and comparison groups (p=0.310).

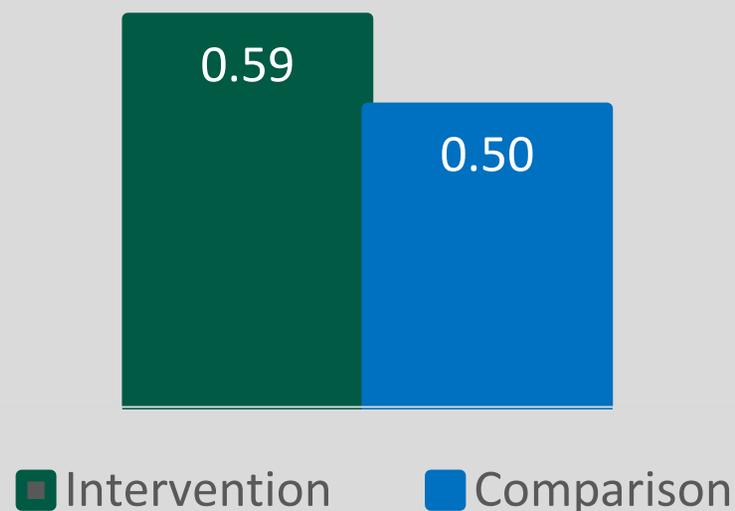
[^]Controlled for anxiety at baseline, maternal employment status, maternal health, physical IPV, perceived social support, level of food security

Results (4)

Change in Early Stimulation from Baseline to 6 Month, by Area



Adjusted Predicted Probability[^] for Early Stimulation at 6 Months (p<0.05)



[^]Controlled for early stimulation at baseline, maternal self-efficacy, maternal education, emotional IPV, perceived social support, food security, maternal depression, maternal anxiety child age

Lessons Learned: Qualitative Feedback Post-Graduation

Mothers

Positives

- Learned to recognize mood and ways to manage stress (mood scale)
- Improved communication with husbands
- Recognize others who may suffer from stress or depression

Challenges

- MBC was too short
- Limited literacy

Case Managers

Positives

- Women understood and applied concepts in their own lives.
- CM practiced these skills in their own lives.

Challenges

- CM had many groups to manage.
- Limited coordination of content between the ECD and MBC materials.

Conclusions

- At the 6 month follow-up we saw evidence of improvements in symptoms of maternal depression and uptake of early stimulation behaviors.
- These data were supported by the qualitative feedback.
- No difference was detected in symptoms of maternal anxiety.
- More rigorous evaluation of the MBC intervention is needed.

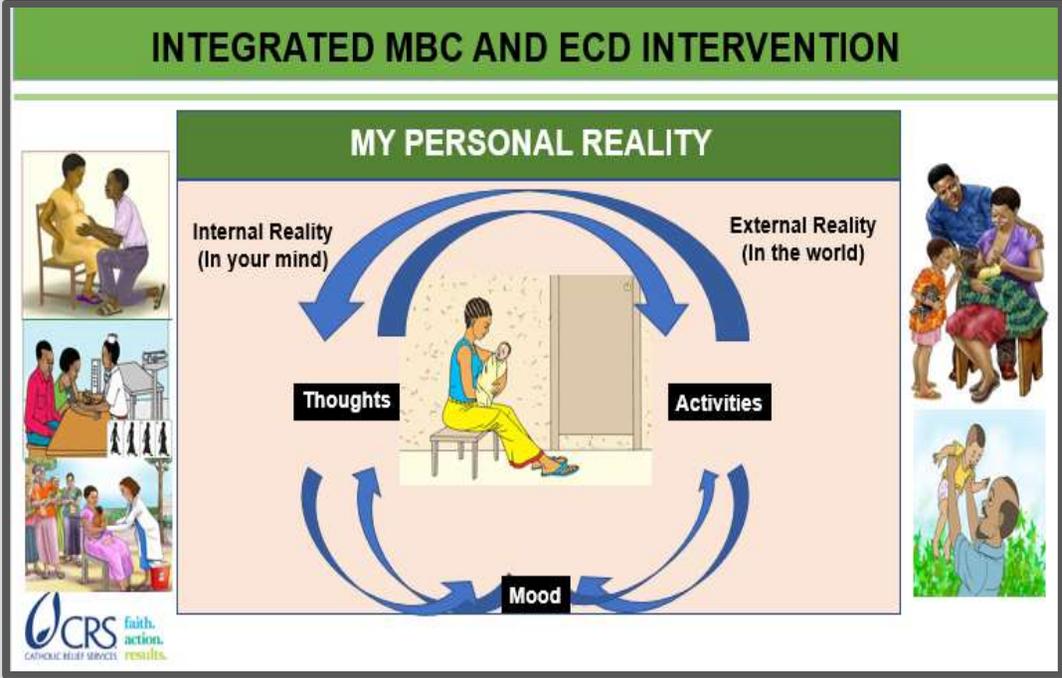
Next Steps: Developing the Integrated Mothers and Babies Course

PROMOTING EARLYCHILDHOOD DEVELOPMENT BEHAVIORS
AMONG CAREGIVERS OF CHILDREN BELOW 2 YEARS
COMMUNITY ENGAGEMENT JOB AID
Module 1: Parenting Messages During Pregnancy and Postpartum



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CATHOLIC RELIEF SERVICES

CONRAD N. HILTON FOUNDATION



Strengthening the Capacity of Women Religious (SCORE) ECD Phase Two (2017 - 2021)



Next Steps: Research and Learning

- 12-month data is being collected in Tanzania and Kenya
- Additional evaluation on its implementation by **lay health workers** in Kenya and Ghana with the Duke Global Health Institute's Evidence Lab
- **Primary research question:**
 - To what extent does the iMBC/ECD implemented by lay health workers affect **mental health** of mothers of young children in rural Kenya / Ghana?
 - Do lay health workers implement the iMBC/ECD with a sufficient level of **fidelity and quality**?
- **Secondary research questions:**
 - Social-emotional development of children
 - Uptake of ECD behaviors by mothers of young children
 - Couple's communication/relationship

Thank you

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