Evaluating a Mental Health Intervention to Improve Mental Health Outcomes in HIV-Infected Adolescents in Low Resource Settings

Dorothy Dow, Geri Donenberg, Suad Kapetanovic , Emanueli Msuya, & Meredith Warshaw

Capsule 519 Investigators

IMPAACT
International Maternal Pediatric Adolescent AIDS Clinical Trials Network

Significance and Rationale

- AIDS is the #1 cause of death among adolescents in Africa.
- HIV+ youth experience significant mental health problems (Dow, 2016; Suad, 2011)
- Mental health problems contribute to long-term morbidity, poor ART adherence, and mortality.
- There are only a few evidence-based mental health interventions for HIV+ youth.
- Implementing evidence-based interventions adapted for low-resource settings is a public health priority.
- Building in-country capacity to deliver effective programs is essential for sustainability.
- The Indigenous Leader Outreach Model has high potential to strengthen local capacity to improve mental health.

What Mental Health Interventions Exist?

- There is little published data on MH intervention outcomes for HIV-infected youth.
- Interventions with promise and ongoing, delivered by lay-counselors.
  - VUKA Family Program (Bhana, AIDS Care 2014; Mellins Glob Soc Welf. 2014)
    - pre-teen (10-14 years) HIV+ youth, family-centered psychosocial intervention, Durban, South Africa
  - Sauti ya Vijana (The Voice of Youth) (PI: Dow, K01 TW-009985)
    - HIV+ youth 12-24 years, RCT feasibility study involving caregivers, Moshi, Tanzania
  - **HIV-affected** children/orphans
    - Theresa Betancourt – Rwanda
    - Karen O'Donnell – Tanzania
    - Laura Murray - Zambia

What Mental Health Interventions Exist?

- Kigali Impereheza Project (KIP) (MPIs: Cohen, M., Donenberg, G., Nsanzimana, S.; R01HD074977)
  - 12-21 year old HIV+ males and females in care
  - TI-CBTe plus two caregiver sessions
  - Cascading supervision model of 21-25 year old HIV+ youth leaders
  - Mental health and adherence outcomes at 6, 12, and 18-months
  - 2-arm randomized controlled trial
    - Trauma Informed Cognitive Behavioral Therapy – adherence enhanced
    - Standard of Care
  - Retention in the intervention sessions and at follow-up data collection >95% (indicating engagement)
  - Low turnover among youth leaders

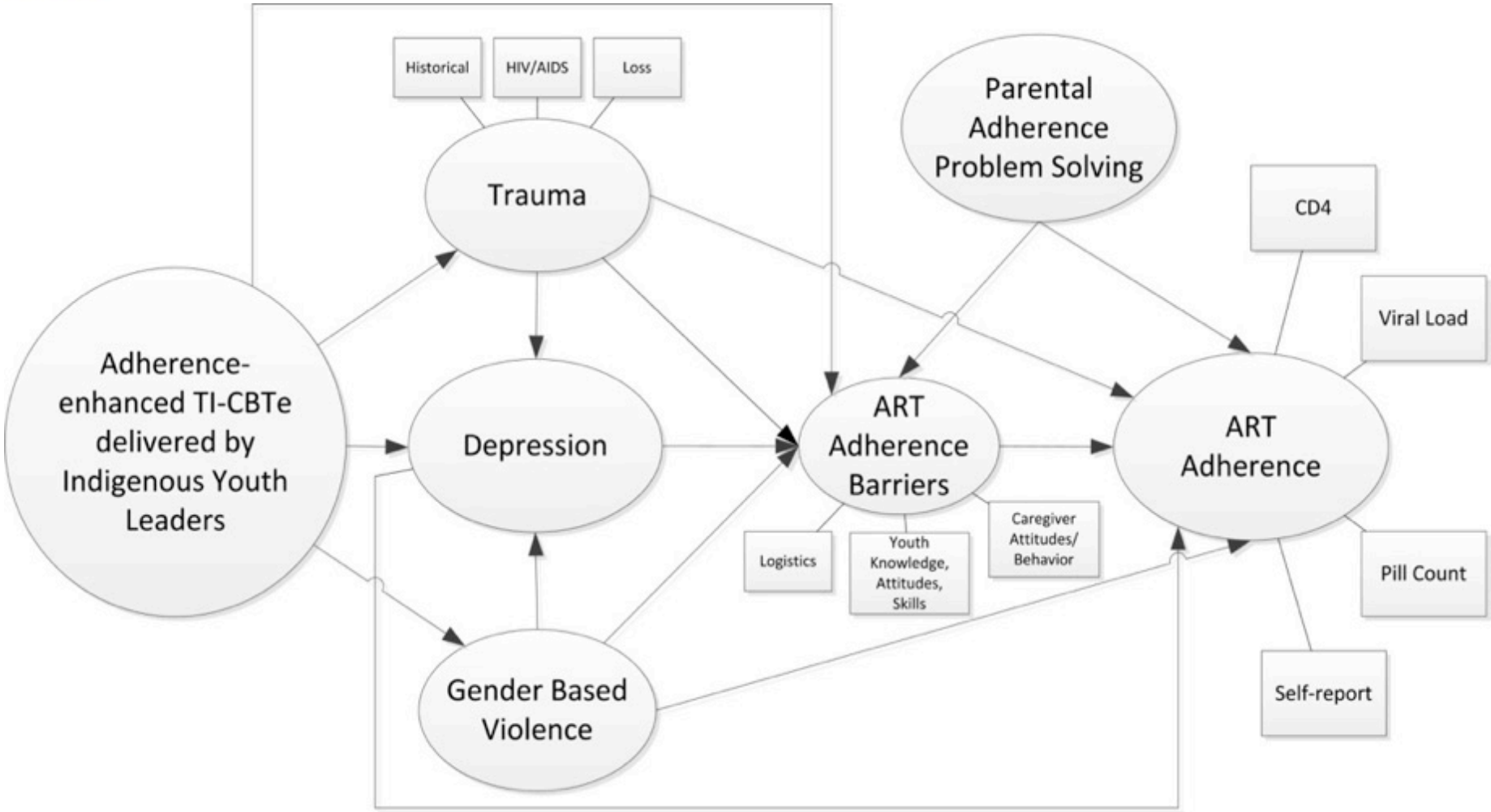
Preliminary Evidence for KIP

- Reduced depression, anxiety, and trauma from baseline to 6-months
- Fidelity to intervention by youth leaders (Donenberg et al., 2015)
- Caregiver involvement high despite many youth being orphans
- Successful supervision model (Fabri et al., 2016)
- Improved caregiver attitudes about HIV (Ingabire et al., 2016; Ingabire et al., 2016)

Why Trauma Informed Cognitive Behavioral Therapy (TI-CBT)?

- Evidence-based and implemented in Rwanda, Tanzania, Uganda, and Zambia
- Resiliency-based mental health intervention
- Addresses stressful life and traumatic events
- If locally adapted, is feasible, acceptable, and effective in low resource settings
- Can be delivered by local staff with little prior counseling experience

Theoretical Framework



Capsule 519 Study Aims

- **Primary Objectives**
  - Test feasibility and acceptability of TI-CBT using the ILOM in a new setting
  - Assess efficacy of TI-CBT compared to standard of care on depression, anxiety, and traumatic stress immediately and 6-months post-intervention
- **Secondary Objectives**
  - Compare change in ART adherence
  - Compare change HIV-1 RNA virologic failure

Methods

- Participants: HIV+, 15-19 year-old males and females; adult caregiver if available; receiving ART for at least 3 months; in care at clinic site.
  - Meet screening criteria on one or more mental health measures
    - Center for Epidemiological Studies Depression Scale for Children (score > 15)
    - UCLA post-traumatic stress disorder - reaction index (score > 35)
    - Youth Self-Report Anxiety/Depression narrow band (score > 8)

Methods (cont.)

- Assessments: Baseline, immediate post-test, 6-months
- Two conditions: Random assignment to TI-CBT vs. SOC
- Indigenous youth leaders: ≥ 21 years old; Completed first year of secondary school; Co-facilitators
- ADAPT-ITT: Adaptation to setting (Wingood & DiClemente, 2000)
- TI-CBT: 8 – 10 youth; Co-ed; Six 2-hour sessions; Two caregiver sessions (optional)

Measures

- Internationally validated tools
- Will be vetted, adapted and revised by local staff
- Translated and back-translated
- Outcomes
  - *Primary*: Depression, anxiety, trauma
  - *Secondary*: Adherence (viral load, self-report)

Youth Leader Training

Week 1: Concepts

- psychoeducation
- relaxation
- connections between thoughts, feelings and behavior
- problem solving
- counseling skills

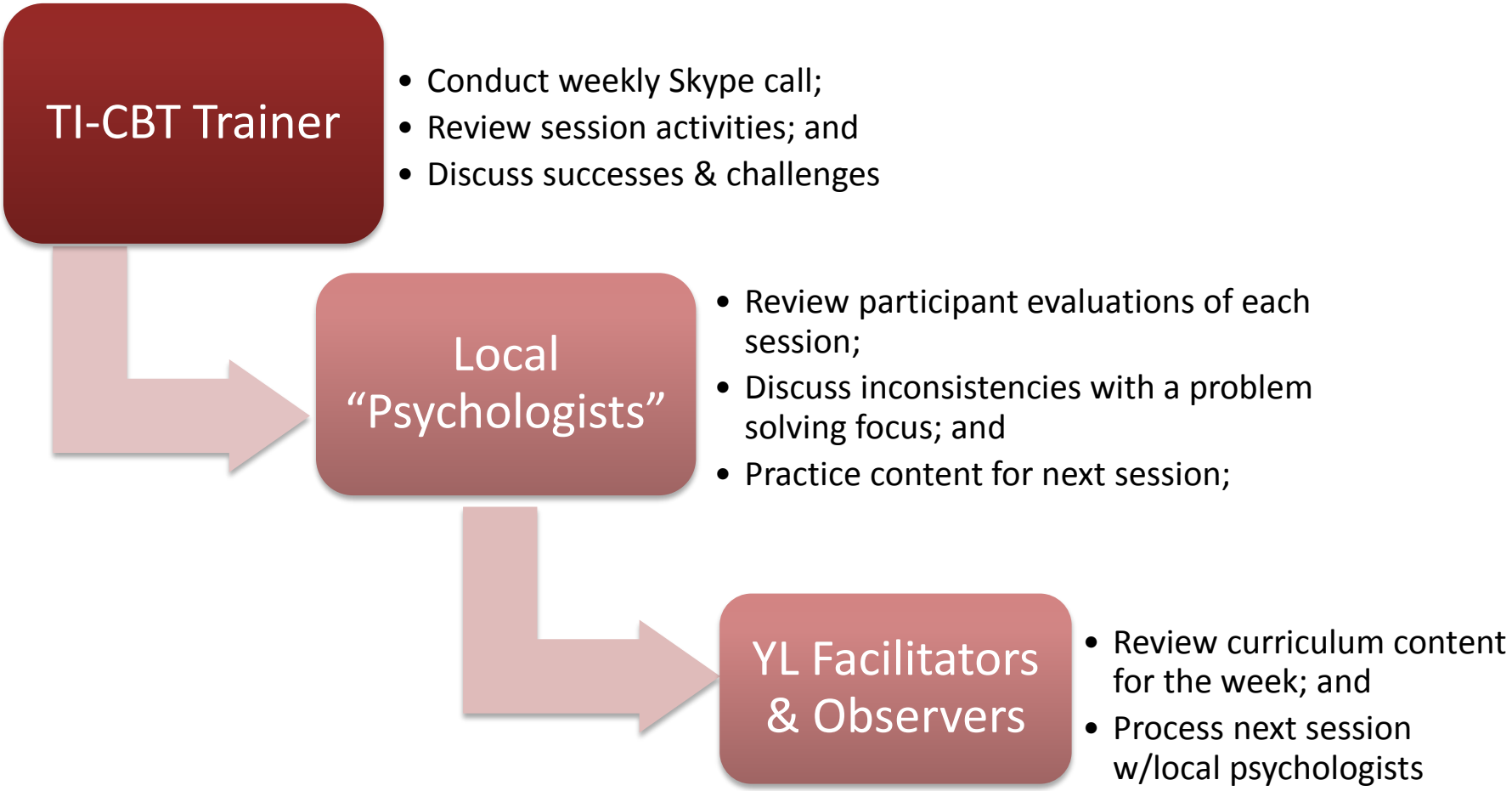
Week 2: "Auditions"

- practice facilitation
- "perform" intervention
- observations by TI-CBT "expert" trainer and local supervisors

Week 3: Selection & Practice

- observations by trainer
- knowledge of concepts
- facilitation skills
- preparation and ease
- comfort
- enthusiasm
- practice

Cascading Supervision



Trauma Informed CBT (TI-CBT)

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Types of Activities

- Group rules
- Large and small groups
- Deep breathing/relaxation
- Body movements (drawing, closings)
- Homework
- Group discussion
- Demonstrations and practice
- Brainstorming

Sessions 1 – 3 Content

Session 1	• How stress affects the body • Stresses of living with HIV • Coping with stress • HIV education
Session 2	• Stress related to HIV & adherence • Healthy/helpful or unhealthy/unhelpful coping strategies • Identifying alternatives and problem solving unhelpful responses
Session 3	• Connection between thoughts, feelings, and behaviors • Cognitive triangle • Learning about unhealthy/unhelpful patterns

Coping With Stress: All Responses

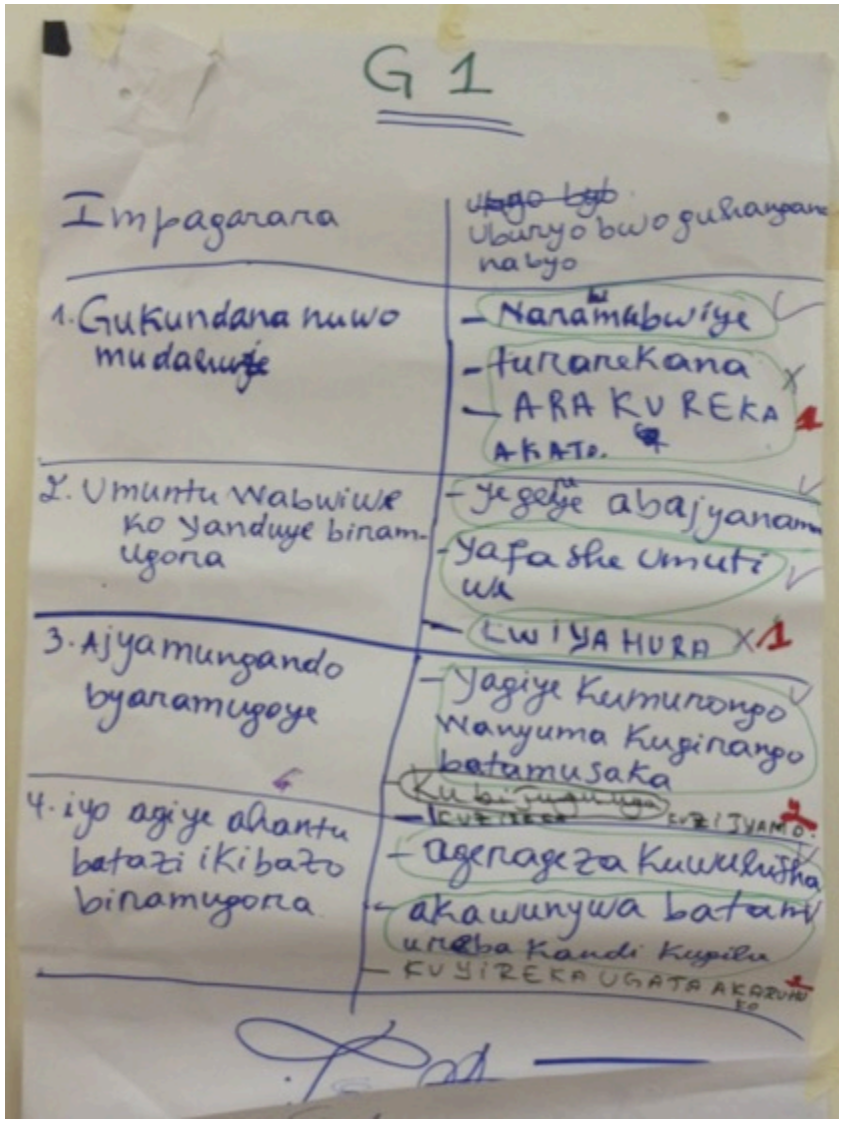
Stressful Event

1. In a relationship with someone who is HIV-

2. Told you are HIV+

3. Attending solidarity camp

4. Going to a new place where no one knows you



Coping Response

1a.Tell friend HIV status
1b. Leave the relationship

2a. Commit suicide
2b. Take medication
2c. Consult counselors

3a. Be last in queue so bags aren't checked
3b. Throw medication away
3c. Don't participate in camp

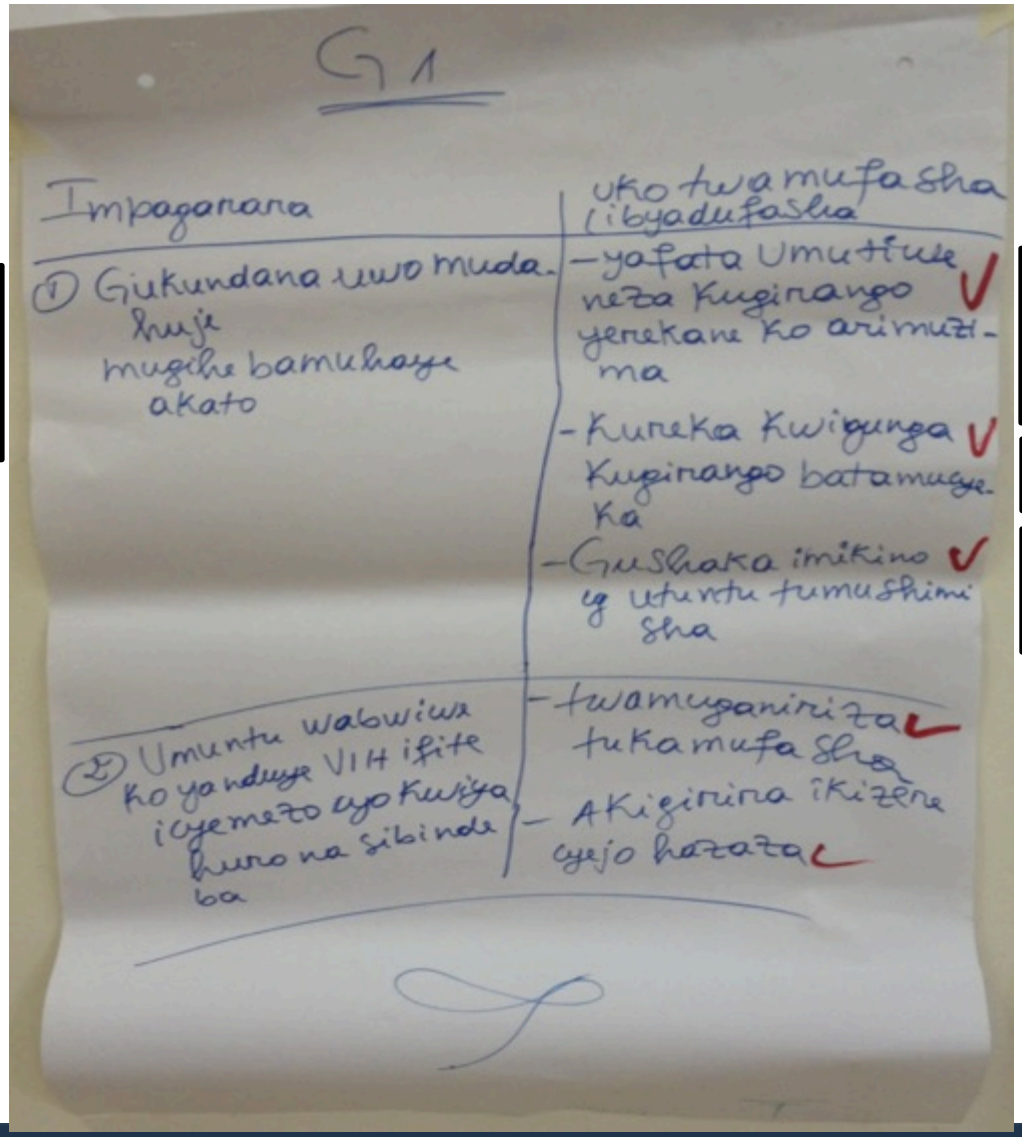
4a. Hide medication
4b. Take medication secretly
4c. Stop medication

Coping With Stress: Alternative Responses

Stress

In a relationship with someone who is HIV-

Being told you are HIV+



Coping

1. Take medication properly to show you are healthy
2. Don't feel isolated
3. Play or find other entertaining things

1. Consult counselors
2. Take medication

Sessions 4 – 6 Content

Session 4	• Cultural gender roles and gender expectations • How gender and HIV influences thoughts, feelings, and behaviors
Session 5	• Interpersonal relationships in the context of pressure (peers & authority), medication logistics, and safe sex practices • Communication styles and solutions to difficult situations related to living with HIV
Session 6	• Review how stress, coping strategies, the connection between thoughts feelings and behaviors and the influence thinking has on making healthy/helpful choices or unhealthy/unhelpful choices while living with HIV • Problem solving skills

TI-CBT: Cost-effective and Sustainable in Low Resource Settings

- ❑ Adaptable for local contexts using systematic methods (ADAPT-ITT)
- ❑ Feasible, acceptable, and well-received by youth, caregivers, health professionals
- ❑ Few props (markers, flip chart, posters)
- ❑ Low tech, no multi-media
- ❑ Implemented in any space that holds small groups
- ❑ Minimal incentives to participate
- ❑ Youth leaders as co-facilitators
- ❑ Cascading supervision model
- ❑ Capacity building

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THANK YOU

Questions?

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