



NIHR Global Health Research Group on Promoting Child and Adolescent Mental Wellbeing in sub-Saharan Africa



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Introduction

- CA mental wellbeing is an under-researched issue in SSA and LMICs generally (Mbwayo, A. et al 2021)
- Globally, mental disorders are the leading cause of disability in young people (WHO, 2020).
- the burden is higher in SSA (Orth, Z., & Wyk, B. van. 2020)
- In SSA (Cortina, M. et. al 2012, March 5)
 - 1 in 7 CA having mental health issues.
 - 1 in 10 (9.5%) having a specific psychiatric disorder.

Introduction

Consequence

- Critical age for mental health
- Poor mental wellbeing among CA is associated with
 - lower school attendance and academic performance
 - Increased involvement in risky behaviours
 - Mental health problems persisting into adult life
 - Poorer quality of life.

Significance of the study

- We need to
 - Understand the extent of the problem , what promotes CA wellbeing
 - Devise solutions and assess to what extent these solutions work
- Strengthening services to promote CA mental wellbeing (Clark, H et. al 2020)
 - will improve CA educational performance
 - Enable them to develop their full potential and become productive
 - investing in CA makes good economic sense.

Aims and objectives

Aim

- To identify, design, implement, and evaluate a culturally acceptable, affordable, and cost-effective **mindfulness intervention** for promoting CA mental wellbeing.

Objectives

- Identify and build networks of policy actors, implementers and community members , CA .
- Identify current policies for promoting CA mental wellbeing and examine their effectiveness.
- Provide an enhanced understanding of the distinct mental wellbeing challenges
- Co-design a whole-school mindfulness intervention for implementation in schools
- Generate evidence on the intervention's efficacy, cultural acceptability, affordability, and cost-effectiveness ready for a multi-centre trial
- Build an African led transdisciplinary global health research group on promoting

Literatures review

- What is mindfulness
- Evidence for mindfulness

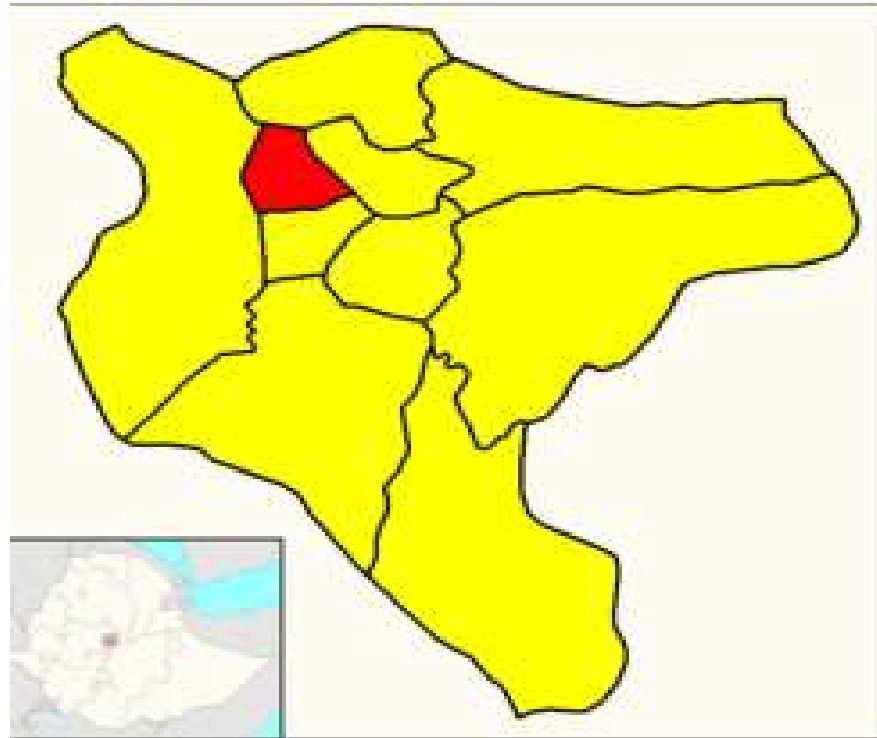


**Implementing
Mindfulness in Schools:**
An Evidence-Based Guide

Methodology

• Study setting

- Addis Ketema sub City
- 359,735- P 2022 (51.5%F &48.5%M)
- Area= 7.410km²
- Population density= 48,547/km²
- One of the poorest sub city

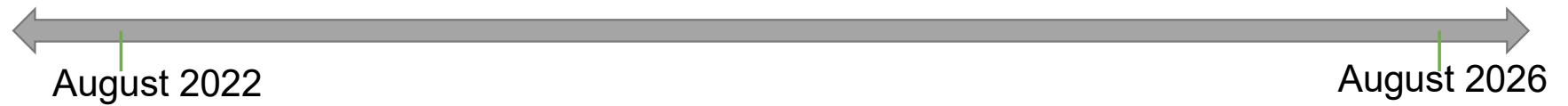


- Number of primary schools= 35
- # students= 43,115
- # Students above grade 4 =24,341
- # of teachers= 1966

Source:- https://cityaddisababa.gov.et/en/sub_administration/addis-ketema

Study period

- The research project will span over 4 years.



Study Design

- The study is a '**critical realist**' rather than a 'conventional' trial and includes PAR
 1. The proposed will be co-designed Stakeholders
 2. The intervention will be continuously improved
 3. we shall assess what worked, for whom it worked, when and under what circumstances, and what aspects of the intervention are responsible for its effects.

Project Flow

Formative work

Consultation with policy actors

Review of the literature

Development grant and partnership formation

CEI scoping work

WP 1: Context, Situational Analysis, Community and Policy Actors Engagement

Objectives:

- (1) To understand the policy context;
- (2) To elicit community and policy actors, collective priorities for CA mental wellbeing;
- (3) To gain community and policy actors input on a whole school intervention to promote CA mental wellbeing.

WP2: Context Specific Intervention, Design and Delivery

Objective:

To develop and deliver a culturally appropriate whole -school intervention to promote CA mental wellbeing working with teachers, parents, CA, community members and policy actors.

WP 3: Applied Health Research

Objectives:

- (1) To evaluate the intervention using a controlled trial & participatory, qualitative, and quantitative research;
- (2) To carry out a cost -effectiveness analysis of the intervention.

WP 4: Education and Training

Objective: to increase capacity for carrying out needs led applied health research in Ethiopia and Rwanda to deliver the project and contribute to the de -colonisation of research in SSA. Includes training in PAR integral to CEI in WPs 1, 2 & 3.

WP 5: Dissemination, Advocacy and Sustainability

Objective: to ensure the rapid, most appropriate and widest dissemination of the findings from every stage of the research to local schools and communities, local, national, regional and international policy actors and academics.

WP 6: Management

Objective: to ensure smooth project performance and full implementation of research programme

Work Package 1

1.1 Situational analysis - (a) desk review and (b) individual in-depth interviews



- 20 policy actors- purposely selected
- Topic guide is prepared and translated
- The transcripts will be analysed thematically using a modified Framework approach

Work Package 1

1.2 Community Stakeholder Engagement

CA and parents reference group and community advisory groups.

- Qualitative research method will be used.
- A series of workshops -will adopt a participatory action research (PAR) approach
- Participants will be selected purposely through school head teachers and teacher educators – reference groups
- Existing groups – Advisory groups
- Data analysis - We will use rapid qualitative research methods (QRM)



Work package 2- Designing intervention

2.1. systematic review using critical realist methodology

- what the intended and unintended outcomes of mindfulness
- what are the key mechanisms through which they achieve outcomes;
- what are the important contextual influences
- What are the main and subsidiary outcomes tested for
- what psychometric tests were used.

Work package 2

2.2 Developing intervention

- Trained teachers (14) on mindfulness will develop
 - culturally acceptable and feasible module
 - training and teaching manuals
- Reference groups and policy actors using PAR will be involved

Work package 3 – Applied health research

- **Main Research Question:**
 - Does a mindfulness intervention delivered to children in schools, in Rwanda & Ethiopia, improve their mental health and well-being?
- **Additional Research Questions:**
 - What mechanisms explain the changes (or lack of) in mental health and well-being?
 - Does the intervention change teacher job satisfaction and overall school culture?
 - Does the intervention have any effects on parental well-being?
 - What is the relative cost-effectiveness of the intervention?

WP3- Study design

A quasi-experimental trial design



Feasibility School



Trail School



Control School

Work package 3

3.1 Pilot

Aim

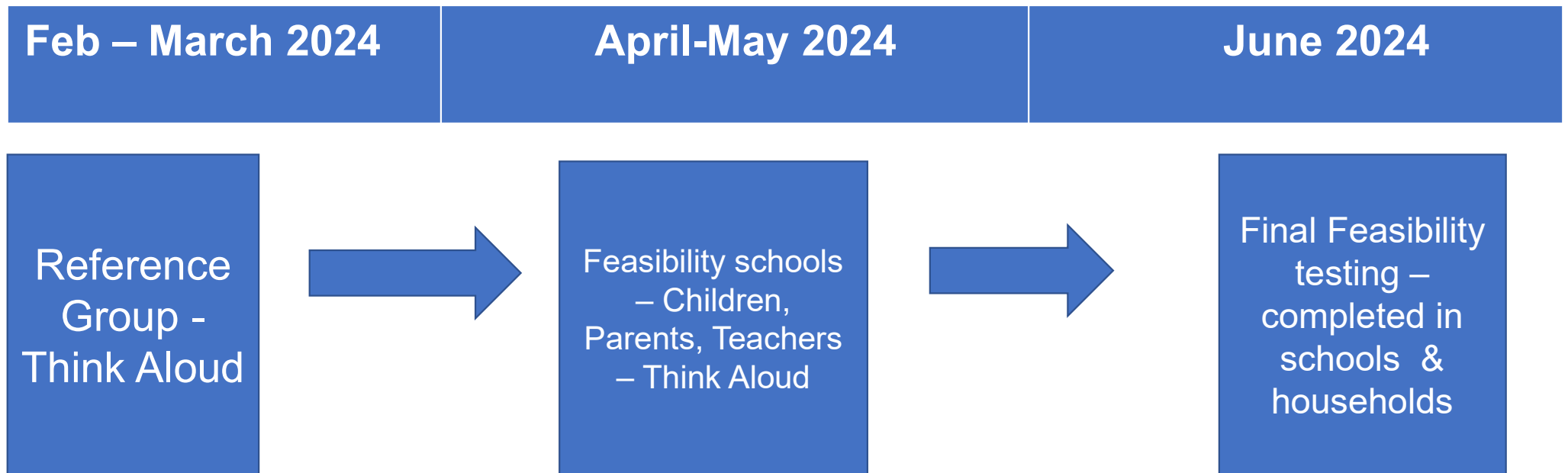
- To test psychometric tools and mindfulness intervention

Feasibility school- Ewket wogen

- Woreda 12
- school- 1185 students
- Students grade $\geq 4^{\text{th}}$ 728

- Psychometric data will be collected
- Teachers will be observed while teaching mindfulness
- FDG- teachers
- “Think aloud” technique to adapt the instruments

Feasibility testing - timeline



Phase 2:- Work package 3

3.2 Base line – (qualitative and quantitative)

- Parents will be interviewed to collect
 - demographic, asset ownership, income, employment, education status, health and wellbeing, parenting style, views about the school, and perception of behaviour of CA attending the primary school.
- FGDs with parents (mothers and fathers in separate groups) and CA (boys and girls and younger and older children in separate groups)
 - about their lives and the problems they experience.

3.3 Delivery (proof of concept trial)



Trial school- Gullele fana -wordea12

- # of students 1253
- # $\geq 4^{\text{th}}$ grade 757

- Will receive whole school mindfulness
- Psychometric data will be gathered with follow up at 6 and 12 month
- Teachers- job satisfaction and mental well being
- Teaching mindfulness will be observed

Control school- 1455
Dej/Geneme-woreda 9
students $\geq 4^{\text{th}}$ grade 903

- Psychometric data will be gathered with follow up at 6 and 12 month
- Teachers- job satisfaction and metal well being

3.3 Delivery (proof of concept trial)



Trail school

- Observation of CA behaviour in classrooms and playgrounds
- teachers' perception of the intervention's FGDs with CA to elicit their experiences
- Data on teacher and pupil absenteeism
- An end-of-line survey of parents and about the intervention

Control school

- Observation of CA behaviour in classrooms and playgrounds
- Data on teacher and pupil absenteeism
- An end-of-line survey of parents

Outcome measures for our study

Children	Teachers	Parents
Children & Adolescent Mindfulness Measure (CAMM)	Kesler Psychological Distress Scale or Short Warwick Edinburgh Mental Wellbeing Scale (WEMBS)	Kesler Psychological Distress Scale or Short Warwick Edinburgh Mental Wellbeing Scale (WEMBS)
Strength & Difficulties Questionnaire (SDQ)	Teacher Job Satisfaction Scale	Child Behaviour Questions
Stirling Children's Wellbeing Scale (SCWBS) or Short Warwick Edinburgh Mental Wellbeing Scale (WEMBS)	Cantril Life Satisfaction Ladder	Cantril Life Satisfaction Ladder
Child Health Utility Index (CHU-9D) or EQ5D-Y	Beyond Blue School Climate Survey	
Cantril Life Satisfaction Ladder		
Beyond Blue School Climate Survey?		

WP 3.4 Outcome analysis

- The quantitative analysis of
 - the effectiveness of the intervention
 - for whom it was effective
 - under what circumstances
 - Analyses of primary and secondary outcomes will be conducted
- The qualitative data will be analysed
 - to evaluate the cultural acceptability of the intervention and CA's, parents,' and teachers' views on its effectiveness



WP 3.5 -Health economics analysis (cost-effectiveness)



will be assessed by

- measuring and valuing the amount of teacher training time
- the time taken by trainers to deliver the training
- any expenses associated with the production of training manuals.

Health economics analysis

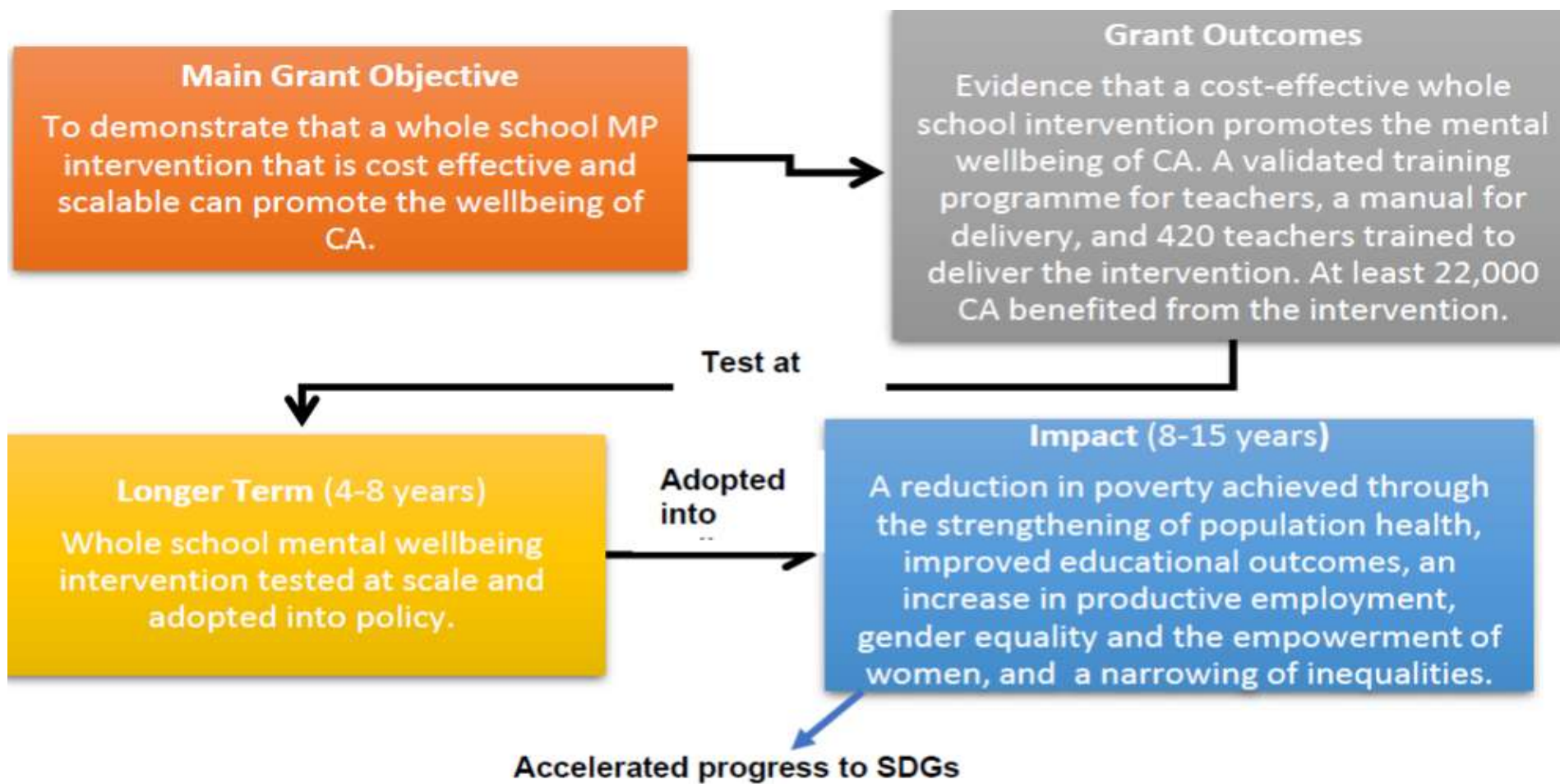


- Health care costs and household expenses (out-of-pocket) associated with management of mental health problems amongst pupils will also be measured.
- Quality Adjusted Life Years (QALYs) and cost per QALY gained (DALYs may also be computed,
- estimate the difference in costs and difference in QALYs attributable to the intervention.
- Appropriate sensitivity analysis will be conducted to test the robustness of study findings on cost-effectiveness.

WP 5:-Dissemination

- Publications policy and strategy- developed
- Open-access publication, engagement and involvement of community members and Policy actors
- Dissemination of findings through
 - a project web site
 - social media, webinars, academic sites, policy briefs, reports, conference papers, and peer-review journal articles.
- Plain language summaries for local communities, including CAs.

Impact



WP.4: Training and capacity strengthening

- Education and training programme will be based on a needs analysis
- training on ethics, safeguarding, and realist research, methods used in applied health research
- Paring of experienced Co-Is with less experience Co-Is
- Doctoral and post Doctoral Programs

Ethical approval and Safeguarding



GHRUG Project: NIHR133712 - NIHR Global Health Research Group on Promoting Children's and Adolescent's Mental Wellbeing in sub-Saharan Africa.

Safeguarding in Research Policy

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Whistleblowing Policy

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Research ethics and Safeguarding training



THANK YOU

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