

<u>Combining HIV Prevention Options with Mental Health Service Delivery</u> for <u>A</u>dolescent Girls (CHOMA):

Results of a Pilot Hybrid Effectiveness-Implementation Randomized Trial

Jennifer Velloza, University of California San Francisco Continuum 2024 · June 9-11, 2024 · Puerto Rico

Conflict of Interest Disclosure

I have no relevant financial relationships to disclose.



Acknowledgments



OF

Lisa Mills



Nicole Poovan



Elizabeth Sherwin



Carrie Mathew



Zinhle Sokhela



Ruth Verhey



Dixon Chibanda



Sybil Hosek



Connie Celum



Sinead Delany-Moretlwe



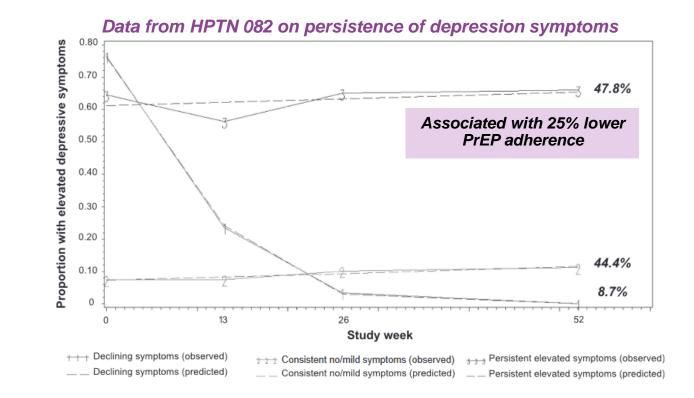




Funding: K99 MH123369 (PI: Velloza) R00 MH123369 (PI: Velloza)

Background

- Overlapping risk of HIV acquisition and common mental disorders (CMD) among adolescent girls and young women
- CMD & HIV driven by overlapping social/structural determinants of health
- CMD associated with low PrEP adherence



Background

- Friendship Bench problem-solving, cognitive behavioral intervention
- 4-6 individual therapy sessions + 1 group session
- Delivered by a lay counselor in a safe space



Peripheral Components					
Implementor (e.g., grandmother figures, young people in the community)	 Core Components Implementor Training in screening and symptom identification Training in counseling skills (problem selection, emotion regulation) Counselor supervision 	Population (e.g., adults, populations living with HIV, pregnant and postpartum women, adolescents and young adults)			
Organization or Community, Setting (e.g., clinic, school, general community location, rural or urban location, Zimbabwe or elsewhere)	Core Components <i>Client</i> Mental health screening 4-6 Friendship Bench sessions with problem selection and action plan development Group sessions with economic empowerment activity 	Practice Delivery (e.g., bench outside HIV clinic, primary care clinic, antenatal care clinic, or in community setting)			

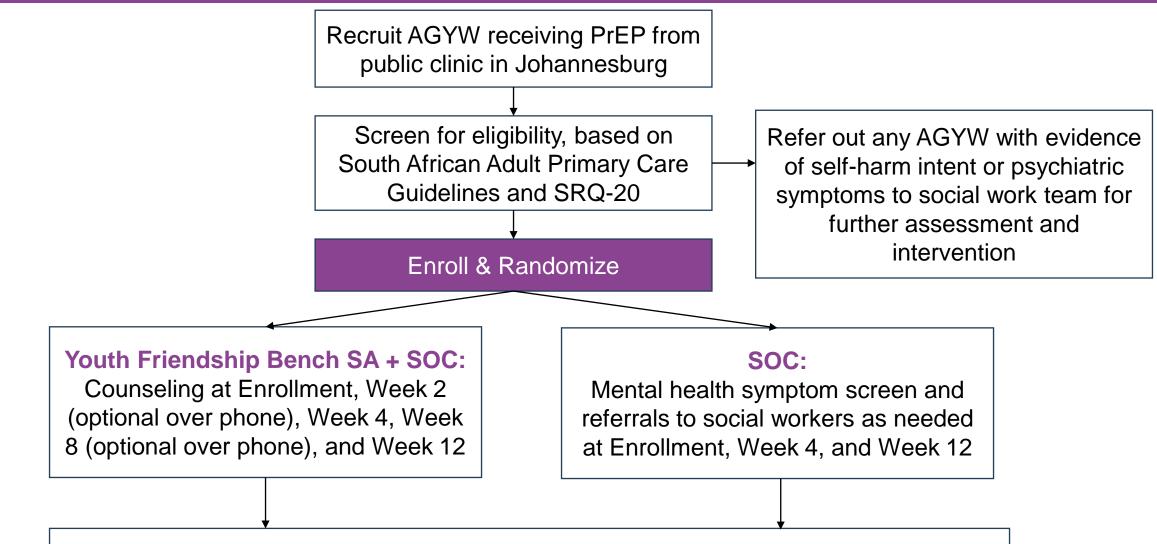
Our goal was to evaluate preliminary effectiveness, acceptability, feasibility, and appropriateness of our "Youth Friendship Bench SA" intervention to address common mental disorders and PrEP adherence among young South African women

Study Setting and Population

- Single-site, open-label pilot hybrid effectiveness-implementation trial
- Conducted from April 2023 Feb 2024
- Already taking PrEP or interested in initiating PrEP
- Elevated CMD symptoms based on Self-Reporting Questionnaire-20 item [SQR-20] score ≥7
- No active, unmanaged psychosis or suicidal ideation or intent



Study Design



Outcomes: PrEP adherence & common mental disorder symptom reduction at Week 12

Statistical Analyses

• Co-primary outcomes, assessed at Week 12:

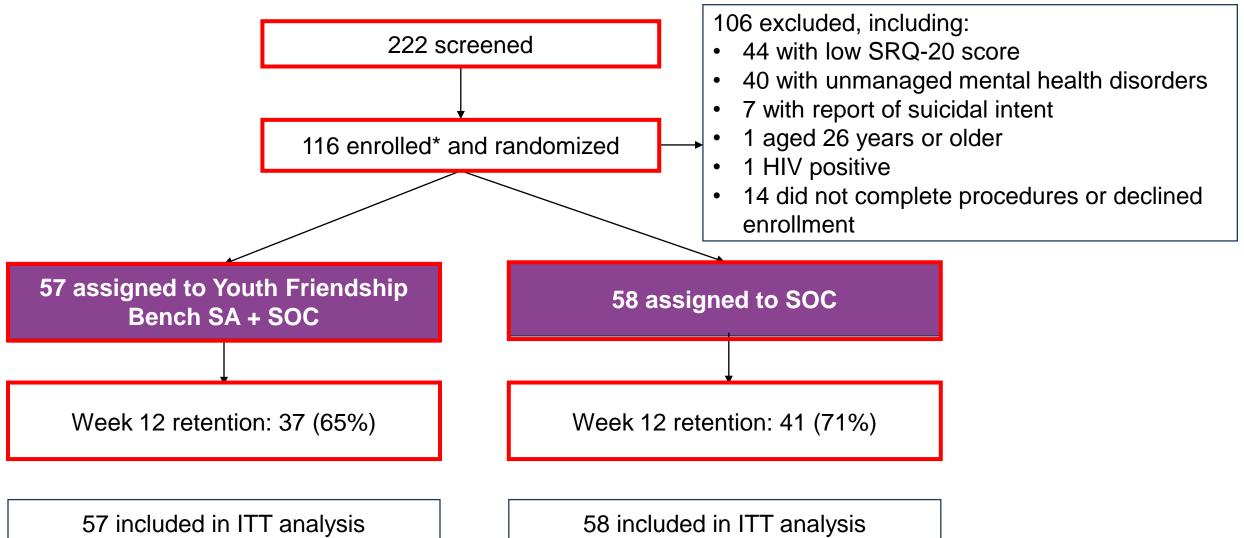
- Proportion with PrEP adherence as measured by detected tenofovir (TFV) in urine using a urine point-of-care assay
- Proportion with reduced symptoms of CMD as measured by SRQ-20 scores <7

Secondary outcomes:

- PrEP adherence and CMD symptoms at Week 4
- Acceptability, feasibility, appropriateness with AIM, FIM, and IAM scales (Likert responses 1-4, items summed and average for each scale)
- Intent-to-treat analyses
- Poisson regression with a log-link and robust standard errors



Screening, Enrollment, & Follow-up



35 included in per-protocol analysis

58 included in ITT analysis 48 included in per-protocol analysis

Participant Characteristics

	Intervention N=57	SOC N=58
	N (%) or Median (IQR)	
Age	21 (19 – 22)	21 (20 – 23)
Some college education	21 (37%)	19 (33%)
SRQ-20 score for depression symptoms	9 (8 – 10)	8 (7 – 10)
GAD-7 score for anxiety symptoms	7 (5 – 11)	6 (4 - 10)
Positive PC-PTSD score for traumatic stress symptoms	28 (49%)	20 (35%)
Gender-based violence	44 (77%)	41 (71%)
Sexual partner in last month	37 (65%)	42 (72%)
Transactional sex in last month	11 (19%)	11 (19%)

Effect of the Intervention on PrEP Adherence

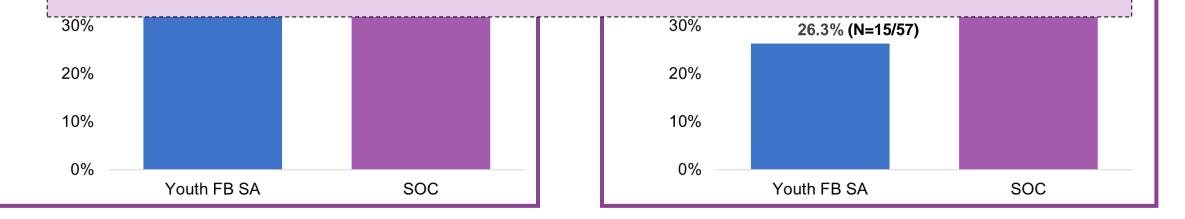
Primary Outcome: Week 12 (N=115)			Secondary Outcome: Week 4 (N=115)				
100%	Positive Urine POC As	ssay Result	1	100%	Positive Urine F	POC Assay Result	
90%				90%			
S	PrEP adherence over time:						
Urine positive test among 47% at Week 4 versus 43% at Week 12; p=0.25							,
30%				30%			
20%				20%			
10%				10%			
0% -	Youth FB SA	SOC		0% —	Youth FB SA	SOC	

Effect of the Intervention on Mental Health

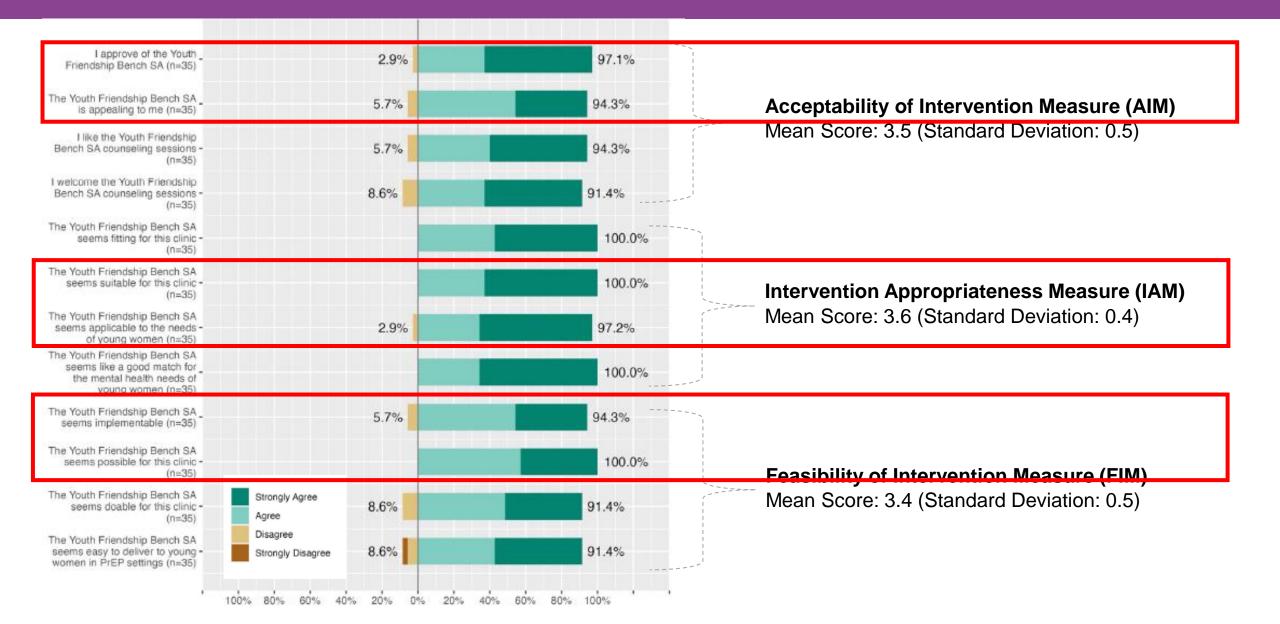
Primary Outcome: Week 12 (N=115)			Secondary Outcome: Week 4 (N=115)			
100%	SRQ-20 Score <7		100%	SRQ-20 Score <7		
90%			90%			
CMD symptoms declined overall						

SRQ-20 <7 among **30%** at Week 4 versus **45%** at Week 12; p<0.01

% of participants



Intervention Acceptability & Feasibility



Conclusions

- No intervention effect on PrEP adherence or CMD symptoms at Week 12
 - Short-term intervention effect on PrEP adherence at Week 4
 - Reductions in SRQ-20 symptoms in both arms

"No one ever asked me how I'm feeling before" Study participant

- Acceptability, feasibility, and appropriateness scores were high
- Challenging to retain this population
- Future research is needed to:
 - Improve integrated mental health and PrEP services for AGYW over a long-term period
 - Promote standard-of-care mental health service delivery in resourceconstrained settings