



Ziphamandla:

A study aimed at adapting a
cognitive-behavioral based
intervention for adherence and
depression in HIV to the South
African context.

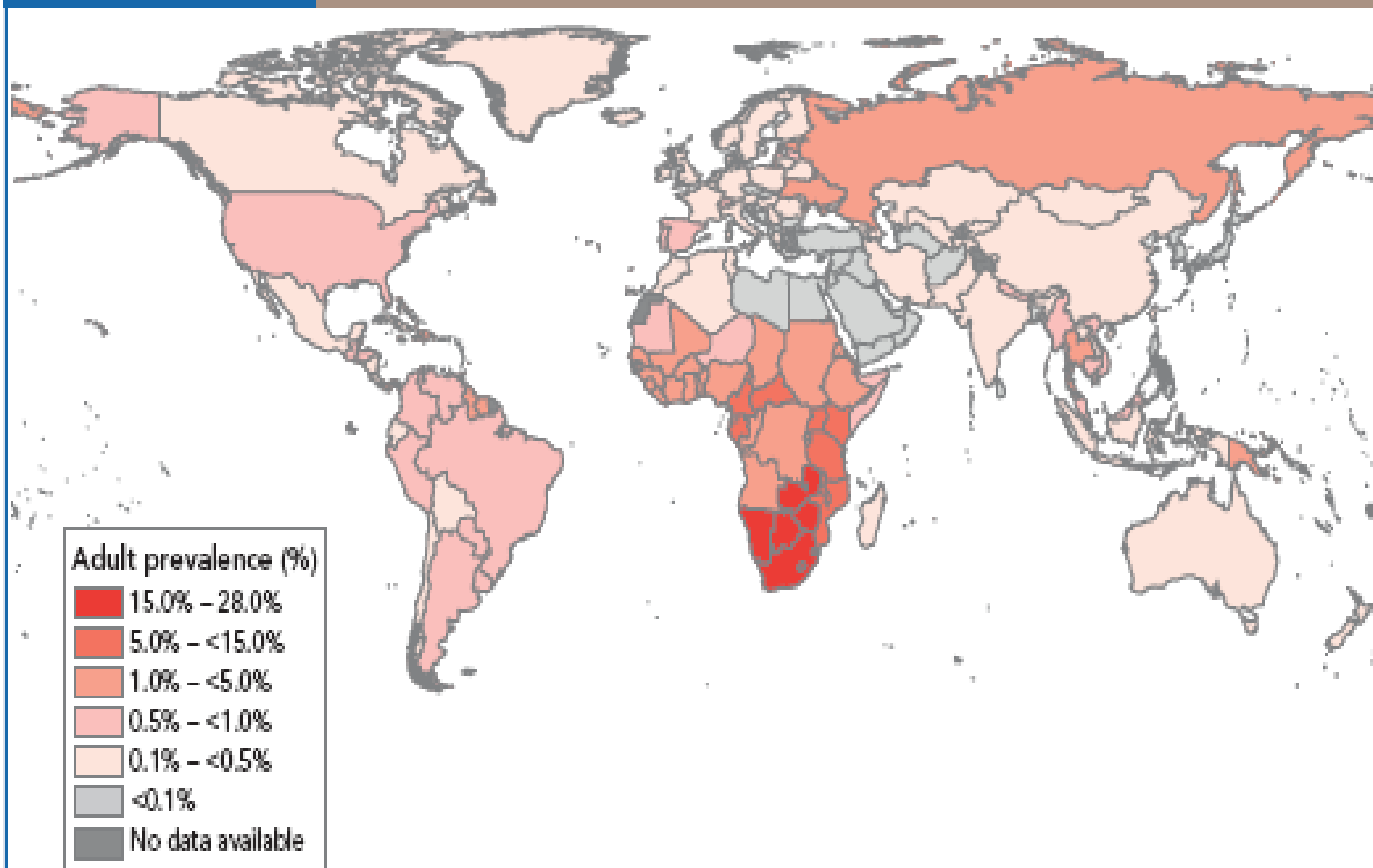
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FIGURE 2.2

A global view of HIV infection, 2007

33 million people [30 – 36 million] living with HIV, 2007



Mental Disorders in South Africa



- SASH Study – National Lifetime Prevalence (Stein et al., 2009)
 - Any Disorder 30.3%
 - Mood Disorders 9.8%
 - PTSD 2.3%
 - Alcohol Abuse and/or Dependence 14%
 - Drug Abuse and/or Dependence 4.5%
- Freeman et al. (2007) – Prevalence among PLWH
 - Any Disorder 43.7%
 - Major Depression 11.1%
 - Mild Depression 29.9% (Total 41%)
 - PTSD 4.9%
 - Alcohol Abuse and/or Dependence 15.3%
 - Drug Abuse and/or Dependence 2.2%



Limited Treatment Providers = Limited Treatment Options



- **Mental health system in South Africa** (Kleintjies, S., Lund, C., Saxena, S. WHO-AIMS report on mental health system in South Africa. WHO and Department of Psychiatry and Mental Health, University of Cape Town, South Africa., 2007).
 - Few mental health professionals
 - 0.28 psychiatrists per 100,000
 - 0.32 psychologists per 100,000
 - Limited psychosocial intervention administration
 - 88% of outpatient facilities had at least one psychotropic medication of each class available
- **Overwhelming need**
 - 8,688,000 HIV+, 3.8 million HIV+ with mental illness
 - @13 psychologists per 4,000,000

Impact of Depression on Adherence



- Depression is associated with poor medication adherence and accelerated disease progression (Nachega, et al 2011; Linnemayr & Wagner, 2011; Pence et al., 2007; Safren et al., 2001).
- Depressed patients are 3x more likely to be non-adherent to medical treatment regimens than non-depressed patients (DiMatteo et al., 2000).
- HIV adherence interventions for individuals with mental health disorders are lacking (Amico et al., 2006; Simoni et al., 2006).

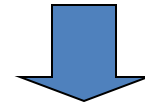
Slide courtesy of Dr. Conall O'Cleirigh

Goals & Research Trajectory

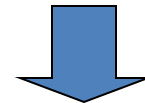


- To develop a culturally-appropriate, short-term, cost-effective treatment for depression
- Treatment must be highly structured and manualized
- Needs to be administered by primary care staff
- Feasibility, acceptability, and effectiveness need to be ascertained

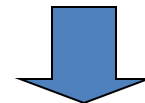
Qualitative interviews of PLWH experiences of depression



Case series of nurse-administered CBT-AD



Pilot small RCT of nurse-administered CBT-AD



Large scale, randomized controlled trial



Qualitative Results



- Somatic complaints expressed first
 - No perception of link to emotional state or cognitions
- Awareness of change (often accompanied by self-blame)
 - I am not my usual self
 - I am not feeling right
 - I wasn't as I see me now
- Limited insight into cognitions
 - Probing required to access patient's thoughts
- Affective vocabulary was limited
- Culture-specific expressions
 - I am thinking too much
 - I have pain in my heart
- Dysfunctional thoughts were evident
 - There is no answer.
 - I am being punished.
 - I am no more a person.
 - I am not good.





Cognitive-Behavioral Therapy for Adherence & Depression (CBT-AD)

- Developed by Steve Safren and colleagues
- Based on traditional CBT approaches
- Combined with techniques applicable to chronic illness
- 7 modules
 - Life-Steps for medication adherence
 - Psychoeducation
 - Activity scheduling
 - Cognitive restructuring
 - Problem-solving
 - Relaxation and diaphragmatic breathing training
 - Review session: maintenance of changes / relapse prevention
- Empirically validated in U.S. (Safren SA, O’Cleirigh CO, Tan JY, et al. A randomized controlled trial of cognitive behavioral therapy for adherence and depression (CBT-AD) in HIV-infected individuals. *Health Psychol.* 2009;28:1-10.)



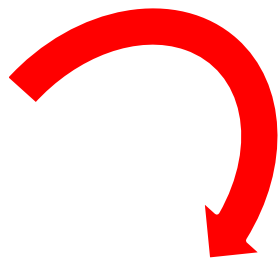
Adapted CBT-AD protocol (Ziphamandla)



- The intervention comprises 6-8 sessions of CBT-AD lasting 1 hour each.
- The session modules are as follows:
 - **Module 1** – Life Steps for HIV Medication Adherence
 - **Module 2** - Psychoeducation/ MI
 - **Module 3** – Activity Scheduling
 - **Module 4** – Problem-solving
 - **Module 5** – Relaxation and Diaphragmatic Breathing



Population and Setting

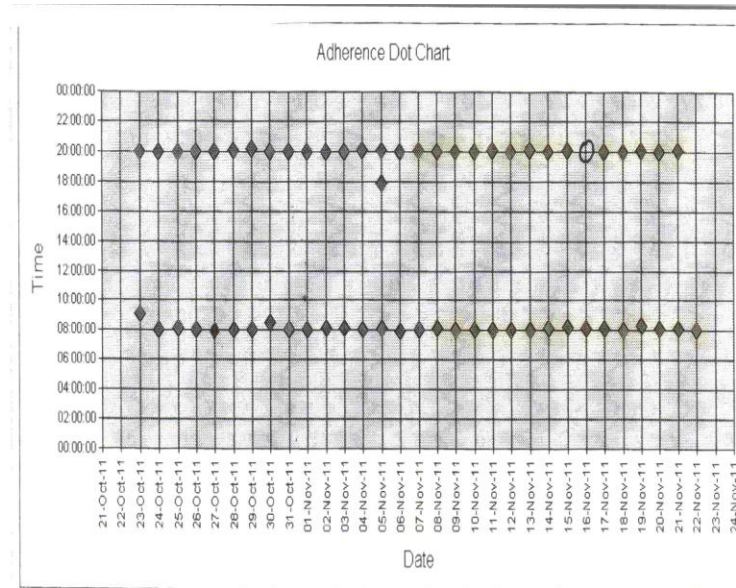
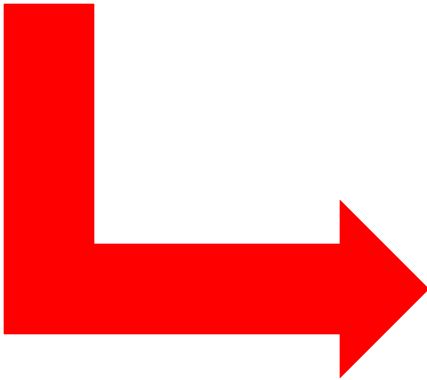


- Participants:
 - Xhosa speaking
 - 18+
 - Male and female
 - ART users
- Study sites:
 - Michael Mapongwana CHC
 - Medicines Sans Frontières Ubuntu Clinic

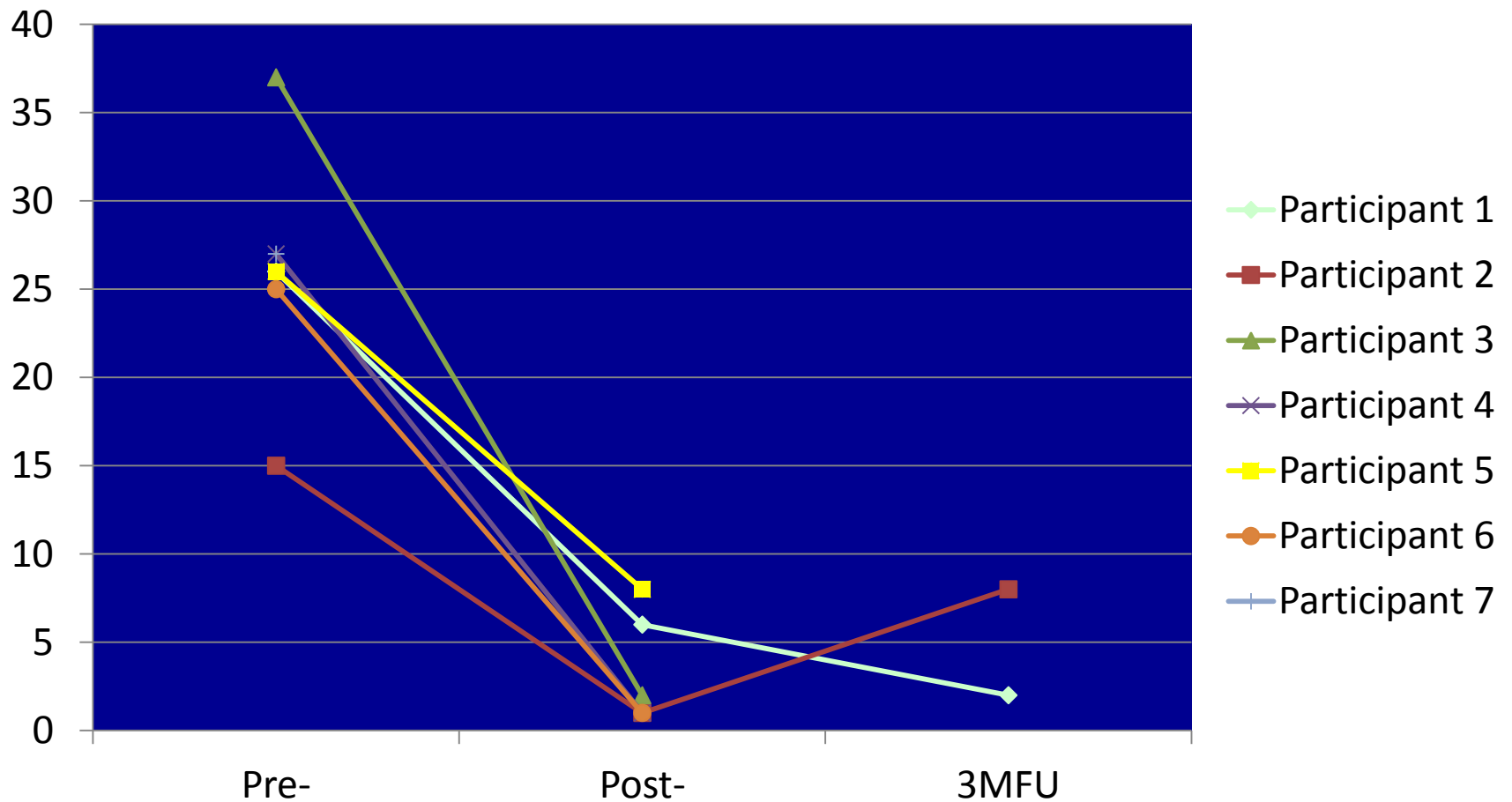
Method

- Data collected from Sept. 2011 – Sept. 2012
 - Pre- and post-: MINI, GAF, HAM-D, Sheehan Disability Scale
 - Weekly CES-D and Wisepill data (with corrections)
 - Exit interviews
- Nurse administered CBT-AD
 - 6-8 sessions
 - N=14
 - 3 rounds
 - Weekly supervision – every session recorded
- Incentives
 - Transport costs were reimbursed
 - R200 (\$25) incentive for completion of treatment
- Institutional review board approval

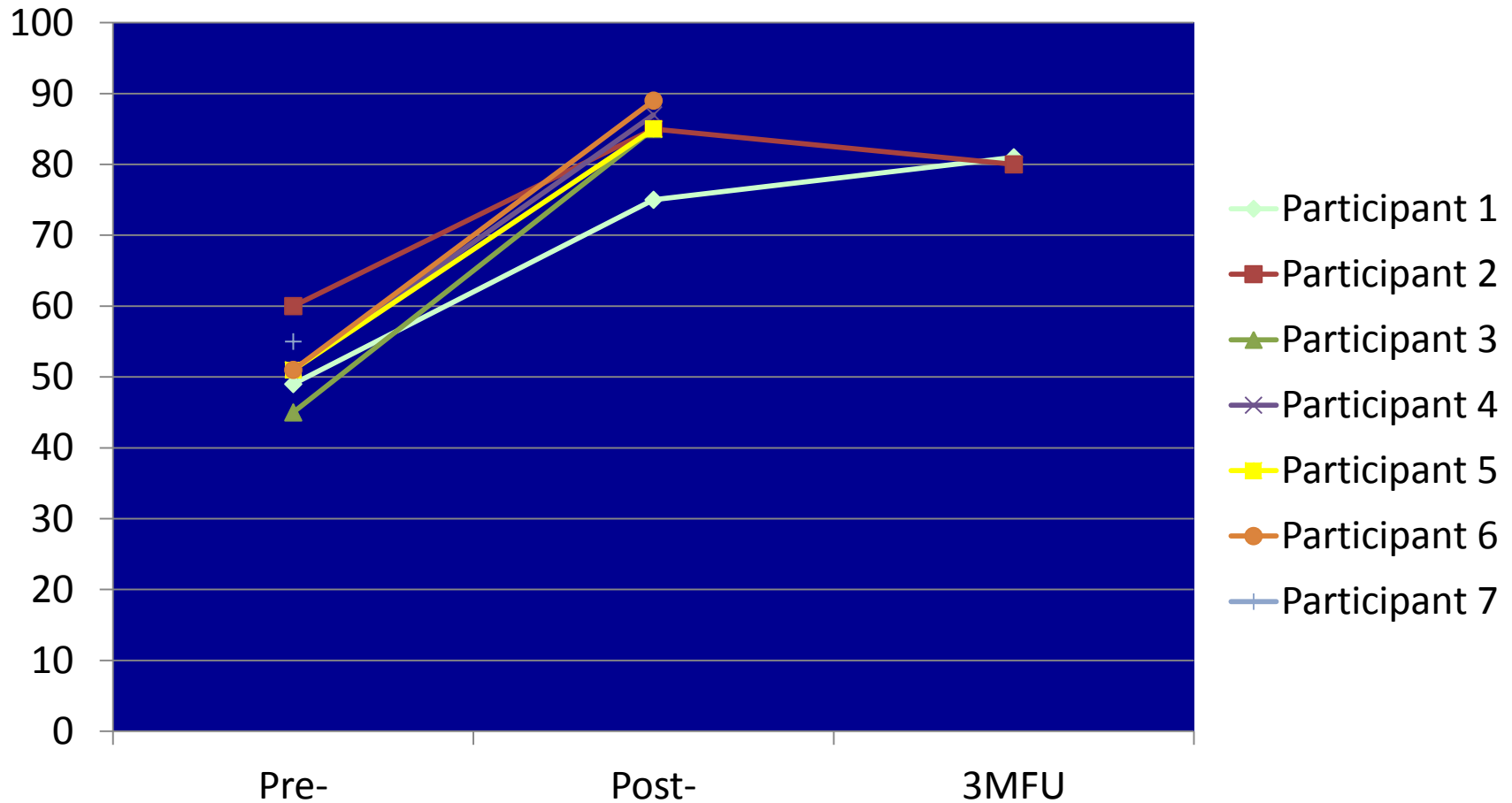
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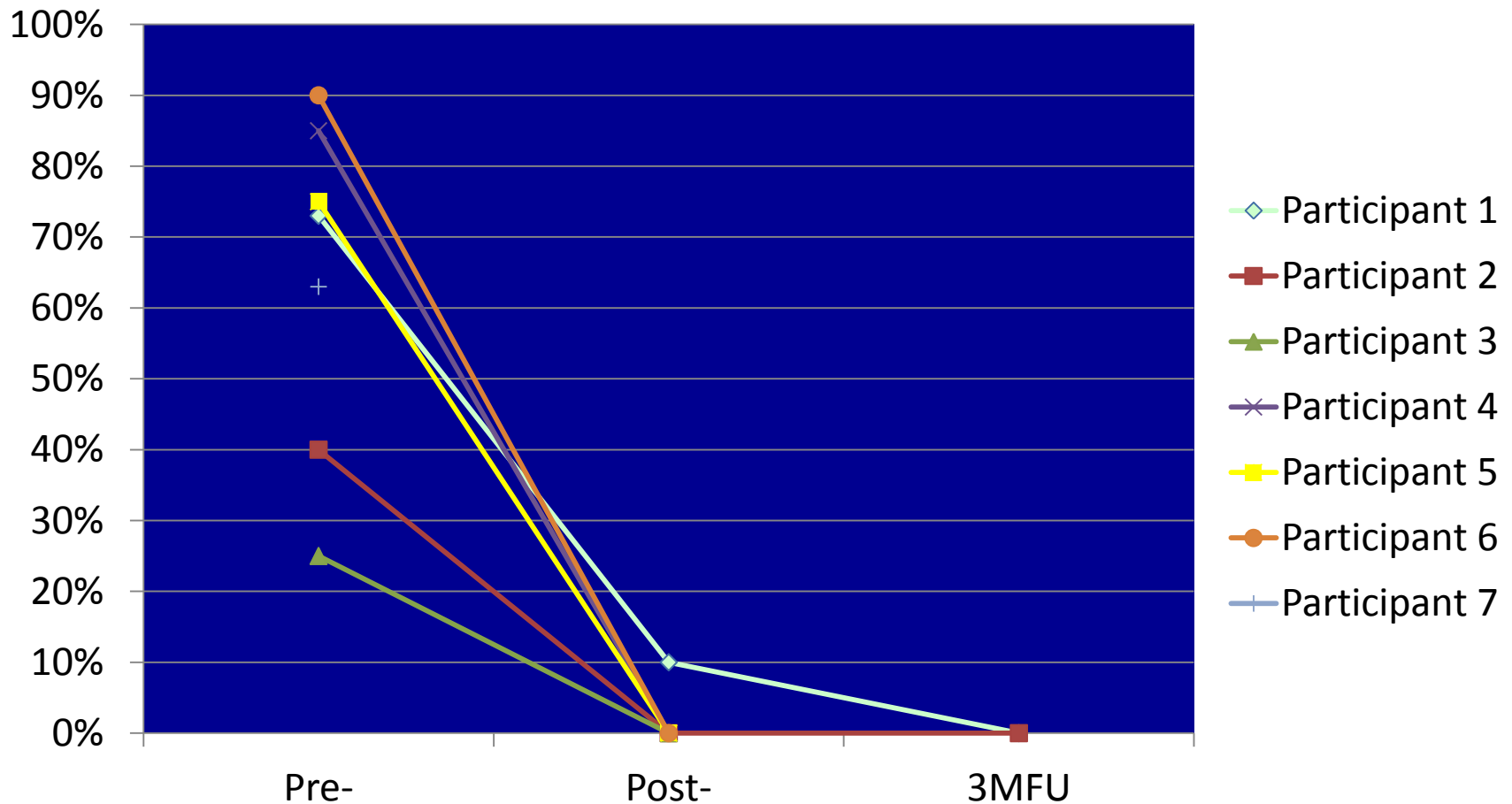
HAM-D Pre- and Post-



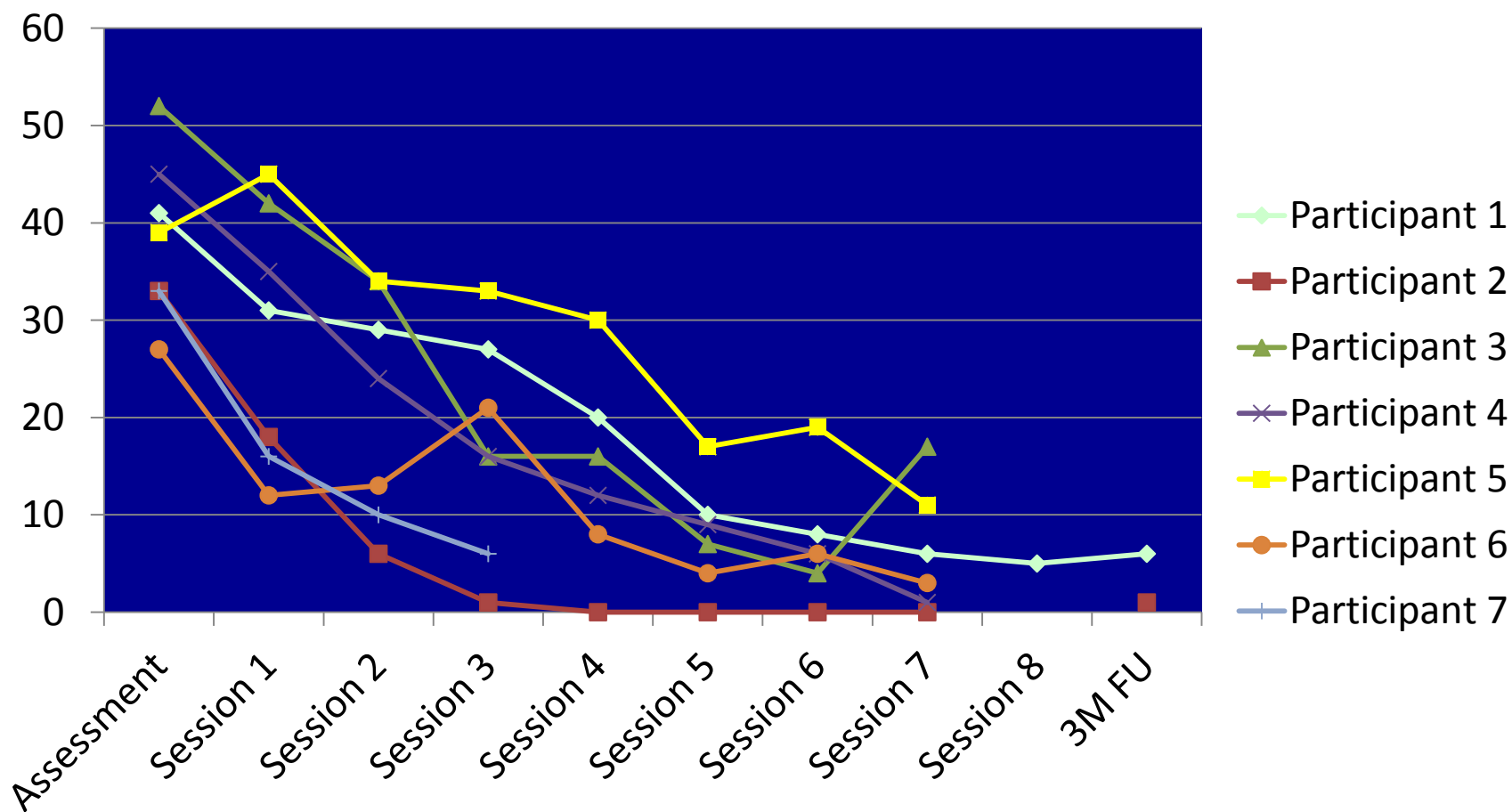
GAF Pre- and Post-



Sheehan Pre- and Post-



CES-D Results to Date



Raw Adherence Data



Patient #	# Prescrib	Taken	Missed	% Adhere	B4 LS	After LS
1	112	110	2	98%		
2	98	93	5	95%		
3	49	46	3	94%		
4	49	48	1	98%		
5	98	96	2	98%		
6	98	72	26	73%	39%	84%
7	70	60	10	86%	83%	89%

Patient 1 Feedback



- “In the beginning I thought it was just like school and that I wouldn’t benefit from it. But as time went by I could really see where this was going and that it was really going to help me and it has been helping me.”
- “These sessions have really helped me, because in the beginning I had pains in my side that I couldn’t sleep with, but now I don’t feel any pains in my body. Now I can sleep on any side of my body.”
- “The homework really helped me to understand what sisiLeti was saying in the session.”
- “They gave us a CD that we can listen to when we are stressed and we can follow the exercises that are done and that also helped me. That was one of the highlights of the therapy.”
- “No my child, I wouldn’t lie, there was nothing about the therapy that I didn’t like. Everything was good. Every skill that I have learned has helped me.”



Patient 2 Feedback



- “I feel much better than before.”
- “I’ve stopped thinking a lot.”
- “I used to feel guilty about the fact that I am HIV-positive and infected my child, but not anymore.”
- “There is nothing about the therapy that I did not like.”
- “I have learned to take my ARVs correctly.”
- “I have learned that when I am thinking too much, I must do deep breathing technique and relax.”
- “Time should depend with the patient.”



Conclusions



- Something worked!
- Short-term intervention is feasible and acceptable
- Affect can be improved in a short time
- Adherence is complex and requires further attention in some patients
- Query ability of counselors to administer the intervention



Thank You!

