What is the future of adherence in the era of potent antiretroviral therapy?

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Mental health and HIV: Some things we know about depression

- **Prevalence of mental health diagnoses is higher than general population** (e.g. Bing et al. 2001; O’Cleirigh et al. 2012)
- **Depression is associated with poor ART adherence** (Gonzalez/Safren 2011; Uhlman et al. 2014)
- **Treating depression without addressing adherence helps with depression but not adherence in prospective trials** (e.g. Pence et al., 2015, Tsai/Bangsberg 2013)
- **CBT-AD (depression and adherence) seems to work** (Safren et al. 2009, 2012, 2016; Simoni et al. 2013)
- But multi-session individual intervention
- High rates of co-occurring problems
Mental health and HIV: Some things we know

Pence et al., 2012
Welcome to Miami

- Highest HIV incidence of any U.S. city (38.8 per 100,000).
- One of highest prevalence (867.6 per 100,000) of any U.S. City
- UM/Jackson Hospital: 50-65% suppression rates (20 or 200 cutoffs) compared to other clinics more like 83-39%
- Ethnic breakdown: White Non Hispanic 16%, Hispanic 64%, Black 20%
- Lack of prevention and treatment services compared to other highly impacted U.S. regions
Intersection of individual (mental health) and structural (disparities) inhibit adherence, persistence, retention even with potent ART
Addressing “syndemics” in HIV:
Our first participants

1. 50’s Black man, antisocial personality disorder, past episodes of depression, hx of alcohol and crack cocaine use.

2. 50’s-year-old Black woman, Bipolar Disorder I (most recent episode depressed, with psychotic features, several substance use disorders (Alcohol, Stimulant, and Cannabis), other specific trauma and stressor-related disorder (persistent complex bereavement), social anxiety disorder, and Hx of 9 suicidal attempts.

3. 30’s-year-old Black, transgender woman, sexually assaulted at age 30 involving forced sexual intercourse with an adult male (PTSD Lifetime; many instances of being attacked for her gender identity including twice while in the study), daily marijuana use and occasional use of cocaine, husband was incarcerated while in the study.

4. 40’s-year-old Black woman, major depressive disorder, suicidality, social anxiety disorder, alcohol use disorder, substance use disorder (marijuana, cocaine).

5. 40’s-year-old Black woman, major depressive disorder, daily marijuana use, was incarcerated 15+ years; significant history of trauma including sexual abuse by family member and by mother’s partner; and, family member murdered in due to drug/gang violence); currently working part-time as and part-time caretaker for her grand nieces and nephews (her deceased family member’s children)
Our first 16 participants

6. 30s Black gay man, major depression (recurrent; reported multiple episodes of depression), several substance use disorders (Alcohol, Chrystal Meth, Cocaine), PTSD Current (military rape by at age 18). Unstable housing, recent abusive relationship, low disability income, Hx of sex work. Attempted suicide recently.

7. 60s Black man, leg and finger amputee, many medical issues including being hospitalized for two weeks while in the study to remove his finger. Tx involved a lot of case managing for improving his poor self-care behaviors which interfered with HIV medication adherence. Almost had to have other leg amputated during study.

8. 50s Black man, past severe substance abuse (crack), had a stroke in 1992. He continued to use crack cocaine until his granddaughter was born in 2012. He has been sober ever since. Since his stroke he has difficulty speaking and being understood which makes it difficult to schedule appointments, transportation, and get proper care.

9. 50s Black man, major depressive disorder past, past substance abuse, extremely low literacy level (was able to recognize familiar words, but could not read or write); had to adapt CBT-outside work to be more behaviorally based; difficulty understanding the doctor and other medical staff – spent one session reviewing what medications he has and when to take them by placing colored stickers on his pill bottles.
Our first 16 participants

10. 50s Black woman, in a wheelchair as a result of her physically and sexually assaulted not receiving immediate treatment, major depressive disorder, trauma, raising her sister’s children (sister struggles with addiction and was incarcerated during study for a violent crime). Now facing losing housing because children not allowed in the facility she lives in, and hard to find additional housing that will allow someone in a wheel chair with kids.

11. 50s Black man, social anxiety disorder, antisocial personality disorder, was incarcerated for 15 years for manslaughter. Recently got kicked out of uncle’s house after they got in a physical fight.

12. 50s Black woman, major depressive disorder. Px has had multiple episodes of depression which seems to interfere with her medication adherence. She entered Tx with VL of 44,300 and got undetected at 4 month follow up. Other medical conditions: Diagnosed with Diabetes and High Blood Pressure.

13. 30s Black woman, domestic issues with the boyfriend, Alcohol abuse. Participant never showed up for the weekly session 1.
Our first 16 participants

14. 50s White woman, history alcohol abuse, trauma from many situations such as being sexually abused (molested and raped) by her father from childhood (started at age 8) into adulthood, running away from home as a teenager, getting raped several times by unknown men, hx of drug abuse (crack cocaine) and alcohol abuse, lost her daughter years ago (when her daughter was age 2) to her father and stepmother, Hx of SMI in family, and hoarding disorder.

15. 40s Black gay man, current substance use (crack). Participant reported a long history of substance use which seems to interfere with his ability to take HIV meds as prescribed.

16. 20s Black woman referred from UM Adolescent Medicine. Dx: major depressive disorder (current), PTSD Current as a result of being raped by her father; Participant has HIV since 14 and although she attends weekly sessions, she appears to be extremely resistant to therapy and avoids to take HIV medication.