ADAPTED HOLISTIC HEALTH RECOVERY PROGRAM (HHRP-A)

Good Evidence – Medication Adherence

INTERVENTION DESCRIPTION

Goals of Intervention

- Improve viral suppression
- Improve antiretroviral therapy (ART) adherence
- Improve service utilization

Intended Population

- People with HIV who have a history of alcohol abuse

Brief Description

HHRP-A is a group-level intervention designed to improve viral load, ART adherence, and service utilization among people with HIV who have a history of alcohol abuse. The intervention is adapted from the Holistic Health Recovery Program (HHRP), a group-level risk-reduction intervention for people with HIV who inject drugs. The intervention includes eight 2-hour group sessions that are scheduled 1 to 2 times per week over consecutive weeks. The sessions are delivered using didactic presentation of materials and experiential exercises. Groups include 8 participants of the same gender and promote interaction between participants to enable the building of positive social support networks among peers. Intervention sessions focus on the following skills: decision-making and problem-solving skills using cognitive remediation strategies; goalsetting; stress management; health improvement, healthcare participation, and adherence to medical treatments; harm reduction through personal spirituality; and self-efficacy. The intervention also addresses relapse prevention; improving emotional, social, and spiritual health; coping with stigma and grief; and reducing HIV sexual transmission risk behavior. Additionally, alcohol use is addressed by exploring decisions that lead to relapse and other unhealthy behaviors, as well as through an in-depth discussion of the principles of the 12 steps of Alcoholics Anonymous, concepts of powerlessness/control, finding inner sources of strength, and social relationships that contribute to paths of sobriety versus relapse. Cognitive remediation strategies, including behavioral games and memory books, are incorporated in the intervention because of the potential for neurocognitive impairment in this population.

Theoretical Basis

- Information-Motivation-Behavioral Skills (IMB) model
- 12 steps of Alcoholics Anonymous
- Buffering model of social support

Intervention Duration
- Eight 2-hour sessions delivered 1 to 2 times per week over consecutive weeks

Intervention Setting
- Community-based organizations where participants received HIV and substance use treatment services

Deliverer
- Trained group facilitators

Delivery Methods
- Behavioral games
- Cognitive remediation strategies
- Didactic learning
- Experiential exercises
- Goal setting
- Group discussions
- Memory books
- Role playing
- Repetition and review

Structural Components
There are no structural components reported for this study.

INTERVENTION PACKAGE INFORMATION

The intervention package and training materials are available here: https://medicine.yale.edu/spiritualselfschema/training/hhrp/plusgroup/

Training materials can also be accessed by contacting: Jessy G. Devieux, Florida International University, Robert Stempel College of Public Health and Social Work, 11200 SW 8th Street AHC5, Miami, Florida 33199.

Email: devieuxj@fiu.edu

EVALUATION STUDY AND RESULTS

Study Location Information
The original evaluation was conducted in Miami, FL between January 2009 and November 2012.

Key Intervention Effects
- Increased ART adherence

Study Sample
The baseline study sample of 243 participants is characterized by the following:
- *80% Black or African American, 14% Hispanic, Latino or Latina, 12% White*
- *71% male, 29% female*
- *Mean age of 45 years*
- *9% employed*

- *Mean years of alcohol use: 23 years*
- *45% ever in alcohol treatment*
- *26% with viral load <50 copies/ml*

Recruitment Settings
Community-based organizations (e.g., substance abuse treatment facilities; HIV care and service organizations)

Eligibility Criteria
Participants were eligible if they were between 18 and 60 years old, had documented HIV infection, self-reported a current prescription of ART, self-reported consumption of any alcohol in the past 3 months, and scored ≥ 8 on the Alcohol Use Disorders Identification Test (AUDIT).

Assignment Method
Of the total number of participants (N = 243), cohorts of at least eight participants of the same gender were randomized to 1 of 2 study arms: (HHRP-A) (n = 127) or a health promotion comparison (n = 116). The groups were of the same gender in order to examine specific under-studied gender differences in response to the intervention.

Comparison Group
The Health Promotion Comparison (HPC) condition addressed common health problems, personal hygiene, nutrition, physical fitness, smoking avoidance/cessation, and healthy living. A standard care HIV education component was included in the HPC due to the ethical responsibility of engaging a vulnerable population. The comparison did not include behavioral skills training or motivational enhancement techniques and did not promote interaction or social support network development. The comparison was delivered in eight 2-hour sessions and delivered to groups of at least eight participants of the same gender; however, this modality was condensed and delivered over a period of two days.

Relevant Outcomes Measured and Assessment Time
- Medication adherence (defined as the self-reported percentage of time ART medications were taken as prescribed over the course of a week) was measured at 3- and 6-months post-intervention

Participant Retention
- HHRP-A Intervention:
  - 71% retained at 3 months post-intervention
  - 62% retained at 6 months post-intervention

- Health Promotion Comparison:
  - 80% retained at 3 months post-intervention
  - 70% retained at 6 months post-intervention

Significant Findings on Relevant Outcomes
- A significantly greater proportion of intervention participants self-reported adequate ART adherence at 6 months post-intervention than comparison participants (93.0% vs. 80.6%, RR = 1.55, CI = 1.09 - 2.18, p = 0.049)

Considerations

Additional significant positive findings on non-relevant outcomes

- Self-reported viral load is not an acceptable PRS outcome; however, a significantly greater proportion of intervention participants self-reported an undetectable viral load at 6 months post-intervention than comparison participants (74.6% vs. 56.7%, RR = 1.49, CI = 1.05 - 2.13, p = 0.033) and self-reported viral load measures were significantly correlated with blood measures at baseline (r_s = -0.21, p = 0.03).

Non-significant findings on relevant outcomes

- There was no significant difference between intervention and comparison participants for medication adherence at 3 months post-intervention.

Negative findings

- None reported

Other related findings

- A significant reduction in service utilization was observed for all participants after the intervention. This finding may be explained by changes in residential status during this study, as nearly a quarter of the sample was in supported residential treatment at baseline, which decreased to under 5% at post-intervention.
- Medication adherence was positively associated with social support at 6 months post-intervention for intervention participants.
- Self-reported adherence at baseline for all participants was significantly correlated with self-reported viral load at 6 months when controlling for self-reported viral load at baseline (r_s = -0.310, p < 0.01).
- The original Holistic Health Recovery Program, then named HIV Harm Reduction Program (HHRP+) (Margolin et al., 2003) was a randomized-controlled trial designed to reduce sex and drug risk behaviors (i.e., sharing injection equipment, condomless sex) and improve medication adherence among people with HIV who inject drugs. The study failed PRS criteria for medication adherence and risk reduction due to the sample size being less than 40 in each study arm at the follow-up assessments.

Implementation research-related findings

- None reported

Process/study execution findings

- Fidelity
    - To ensure adherence to manual guidelines, all intervention sessions were audio taped with informed consent. A random selection of 20% of audiotapes were evaluated for adherence to guidelines, general interpersonal skills, and directness and clarity of communication.
    - Facilitators met weekly with the research coordinator for monitoring treatment fidelity and problem-solving clinical issues that emerged.

Adverse events

- None reported

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REFERENCES AND CONTACT INFORMATION

Attonito, J., Villalba, K., & Dévieux, J. G. (2019). Effectiveness of an intervention for improving treatment adherence, service utilization and viral load among HIV-positive adult alcohol users. *AIDS and Behavior, 24*, 1495-1504.

Margolin, A., Avants, S. K., Warburton, L. A., Hawkins, K. A., & Shi, J. (2003). A randomized clinical trial of a manual-guided risk reduction intervention for HIV-positive injection drug users. *Health Psychology, 22*(2), 223-228.

Contact: **Jennifer Attonito**
Health Administration Program
College of Business
Florida Atlantic University
777 Glades Road
Boca Raton, FL 33431

Email: jattonit@fau.edu