BRIEF ALCOHOL INTERVENTION

Good Evidence – Medication Adherence

INTERVENTION DESCRIPTION

Goals of Intervention
- Improve ART adherence
- Increase viral suppression
- Reduce alcohol use

Intended Population
- Adults with HIV receiving ART who have heavy/hazardous alcohol use patterns

Brief Description

Brief Alcohol Intervention is an individual-level intervention consisting of two face-to-face sessions, each followed by a telephone booster session. It includes motivational enhancement therapy and cognitive behavioral therapy components applied to reduce alcohol use and subsequently improve ART adherence. The intervention provides information about standard alcohol drinks to determine safer and riskier levels of drinking and alcohol's effect on health. Participants receive personalized feedback, consider the pros and cons of drinking, and develop strategies for managing risky moods and situations for alcohol use. They also identify skills and activities to develop an alcohol-independent lifestyle.

Theoretical Basis
- Motivational Enhancement Therapy
- Cognitive Behavioral Therapy

Intervention Duration
- Two, 30- to 45-minute in-person sessions one month apart, each following by a 5-minute booster call 2 to 3 weeks later

Intervention Settings
- Seven large outpatient ART clinics

Deliverer
- Two university-educated psychosocial counselors (one woman and one man) who were trained and supervised weekly

Delivery Methods
- Counseling
- Information sharing
- Skills building

Structural Components

There are no structural components reported for this study.

INTERVENTION PACKAGE INFORMATION

An intervention package is not available at this time. Please contact **Vivian F. Go**, Department of Health Behavior, Gillings School of Global Public Health, University of North Carolina at Chapel Hill, 363 Rosenau Hall, CB# 7440, Chapel Hill, NC 27599.

Email: vgo@unc.edu for details on intervention materials.

EVALUATION STUDY AND RESULTS

Study Location Information
The original evaluation study was conducted in Thai Nguyen, Vietnam from March 2016 to May 2018.

Key Intervention Effects
- Increased viral suppression

Study Sample*
The baseline study sample of 440 PWH is characterized by the following:

Brief Intervention (n = 147)
- *95% male persons, 5% female persons*
- *Mean age of 40 years*
- *68% no high school, 32% any high school or more*
- *48% currently with alcohol dependence or alcohol abuse*
- *53% employed full time, 47% employed < full time*
- *83% ever injected drugs in lifetime*
- *24% any history of drug treatment in lifetime*

Combined Intervention** (n = 147)
- *99% male persons, 1% female persons*
- *Mean age of 40 years*
- *72% no high school, 28% any high school or more*
- *37% currently with alcohol dependence or alcohol abuse*
- *56% employed full time, 44% employed < full time*
- *82% ever injected drugs in lifetime*
- *29% any history of drug treatment in lifetime*

**The Combined Intervention consisted of similar components to the Brief Intervention, but longer (6 in-person sessions and 3 optional group sessions). This intervention did not meet the Good Evidence criteria for Medication Adherence (see *Non-significant findings on relevant outcomes*).

Standard of Care (n = 146)
- *97% male persons, 3% female persons*
- *Mean age of 40 years*
- *73% no high school, 27% any high school or more*
- *40% currently with alcohol dependence or alcohol abuse*
- *53% employed full time, 47% employed < full time*
- *78% ever injected drugs in lifetime*
- *36% any history of drug treatment in lifetime*

Recruitment Settings
Government outpatient ART clinics that are the sole source of ART medications in the province.

Eligibility Criteria
People with HIV (PWH) who were enrolled at ART clinics and receiving ART were eligible if they had hazardous alcohol use (defined as having an Alcohol Use Disorders Identification Test-Consumption score of at least 4 for men and at least 3 for women). Those with a Clinical Institute Withdrawal Assessment score of at least 10 were ineligible due to concerns for risk of alcohol withdrawal.

Assignment Method
Participants (N = 440) were randomized 1:1:1 to 1 of 3 study arms: a Combined Intervention (n = 147), a Brief Intervention (n = 147), or the Standard-of-care (n = 146).

Comparison Group
Participants in the comparison group received the usual care services.

Relevant Outcomes Measured
- Viral suppression was measured at 3- , 6- and 12-months post-enrollment and assessed as the percentage of blood samples with undetectable viral loads (<20 copies/ mL).

Participant Retention
Brief Intervention:
- 92% retained at 3 months
- 92% retained at 6 months
- 88% retained at 12 months

Standard-of-care:
- 92% retained at 3 months
- 91% retained at 6 months
- 86% retained at 12 months

Significant Findings on Relevant Outcomes
- A significantly greater percentage of Brief Intervention participants (89.2%) were virally suppressed at 12 months post-enrollment compared to the comparison participants (78.1%) (difference, 11%, 95% Confidence Interval [CI]: 2% - 20%, p = 0.01) (adjusted for baseline viral suppression percentage).

Considerations
Additional significant positive findings on non-relevant outcomes
- At 12 months, the mean percentage of days abstinent from alcohol was 65% among those in Brief Intervention, 65% among those in the Combined Intervention,** and 50% among those in the standard-of-care comparison group (Cohen d: 39%; 95% CI: 15% - 64%, p = 0.002).

Non-significant findings on relevant outcomes
- No significant effects were found for viral suppression between Combined Intervention participants and comparison participants. Thus, the Combined Intervention did not meet the Good Evidence criteria for Medication Adherence.

Negative findings
- None reported

Other related findings
- None reported

Implementation research-related findings
- None reported

Process/study execution findings
- Cost - the total cost of implementation and administration of the Brief Intervention to 147 participants was $5,700 ($39 per participant). Implementation and startup costs including training accounted for 28% of costs and counselor costs accounted for 30%.

Adverse events
- 15 participants were lost to follow up due to death. This included participants from the Brief Intervention (n = 6), the Combined Intervention** (n = 3), and the standard-of-care (n = 6).

Funding
National Institute on Drug Abuse of the National Institutes of Health (grant number R01 DA037440)
University of North Carolina at Chapel Hill Center for AIDS Research, a National Institutes of Health-funded program (grant number P30 AI050410)

REFERENCES AND CONTACT INFORMATION

Go, V. F., Hutton, H. E., Ha, T. V., Chandler, G., Latkin, C. A., Mai, N. V. T., Quynh, B. X., Nguyen, V., Sripaipan, T., Lancaster, K. E., Blackburn, N., Hershow, R. B., Dowdy, D. W., & Frangakis, C. (2020). Effect of 2 integrated interventions on alcohol abstinence and viral suppression among Vietnamese adults with hazardous alcohol use and HIV: A randomized clinical trial. *JAMA Network Open, 3*(9), e2017115.

Blackburn, N. A., Go, V. F., Bui, Q., Hutton, H., Tampi, R. P., Sripaipana, T., Ha, T. V., Latkin, C., Golden, S., Golin, C., Chander, G., Frangakis, C., Gottfredson, N., & Dowdy, D. (2020). Implementation of two alcohol reduction intervention among persons with hazardous alcohol use who are living with HIV in Thai Nguyen, Vietnam: A micro-costing analysis. *Global Health Action, 13*(1), 1814035.

Researcher: **Vivian F. Go, PhD, MPH, MA**
Department of Health Behavior
Gillings School of Global Public Health
University of North Carolina at Chapel Hill
363 Rosenau Hall
CB# 7440
Chapel Hill, NC, 27599

Email: vgo@unc.edu