Reducing Alcohol Use and Improving Adherence among Men and Women Living with HIV/AIDS

Jeffrey T. Parsons, Ph.D.

Center for HIV Educational Studies & Training
HEST

HUNTER
The City University of New York

Learning Objectives

- At the conclusion of this interactive session, participants should be able to:
  - Discuss issues related to HIV medication adherence and alcohol use more effectively with HIV-positive individuals.
  - Utilize motivational interviewing techniques in order to improve HIV medication adherence among alcohol/drug-using individuals.

Background & Significance

- Problems related to alcohol use are more prevalent in HIV+ patients than in the general population. **(Galvan et al., 2002)**
- Alcohol use is a risk factor for poor HIV medication adherence and in some studies has been shown to be the most significant predictor of adherence. **(Chandler, Lau, & Moore, 2006; Parsons, Rosof, & Mustanski, 2007; Samet et al., 2004)**

Background & Significance

- Optimal HAART adherence is less often achieved in alcohol abusers due to:
  - beliefs and misunderstandings about interactions between alcohol and HAART **(Sankar et al., 2007)**
  - immediate cognitive and behavioral changes from alcohol use **(Parsons, Rosof, & Mustanski, 2008)**

Background & Significance

- Dual interventions are necessary. **(Parsons, Rosof, & Mustanski, 2008)**
- One size fits all approach for medication adherence is ineffective. **(Simoni et al., 2006)**

Project PLUS: Positive Living through Understanding and Support

PLUS
Positive Living through Understanding and Support

Medication Adherence Among HIV Positive Alcohol Abusers

Funded by the National Institute on Alcohol Abuse and Alcoholism, RO1 AA 13556

Study Description

- Project PLUS aims to simultaneously improve adherence to HIV meds and reduce drinking among HIV+ men and women classified as heavy drinkers
  - >16 drinks/week for men; > 12/week for women
- This eight-session, manual-driven, individual intervention combines Motivational Interviewing (MI) and Cognitive Behavioral Skills Building (CBST).

Adherence and Alcohol Measures

- **Adherence**:
  - Biological measures: viral load and CD4 count
  - Self-report measures: Percent dose adherence and percent day adherence
- **Alcohol Use**:
  - Self-report measures: Number of Standard drinks and Drinks per drinking day

Sample Characteristics (*N* = 143)

- 79.7% (*n* = 114) are men
- 65.7% are African-American
- Mean age = 43.4 (SD = 6.9)
- Mean years on HAART = 7.3 (SD = 4.3)
- Mean years HIV+ = 10.6 (SD = 5.1)
- Mean log viral load = 3.35 (SD = 1.5)
- Mean CD4 count = 425.01 (SD = 308.18)

The Intervention
Eight individual sessions

- First two sessions focus exclusively on **Motivational Interviewing (MI)**.
- Last six sessions use MI and **Cognitive Behavioral Skills Building (CBST)**.
  - A menu-approach is used.
  - Following a functional analysis, specific skills building modules are delivered based on individual needs of each client.

Cognitive Behavioral Skills Building
Provider chooses 3 modules for each behavior based on client's skills deficits

ALCOHOL

- Coping with Triggers to Drink
- Managing Cravings to Drink
- Managing Thoughts to Drink
- Refusal Skills
- Moderated Drinking

ADHERENCE

- Managing Side Effects
- Communication with Health Care Providers
- Managing Cravings to Skip Medication
- Managing Thoughts to Skip Medication

EITHER

- Increasing Pleasant Activities
- Managing Negative Moods
- Making Time For Self

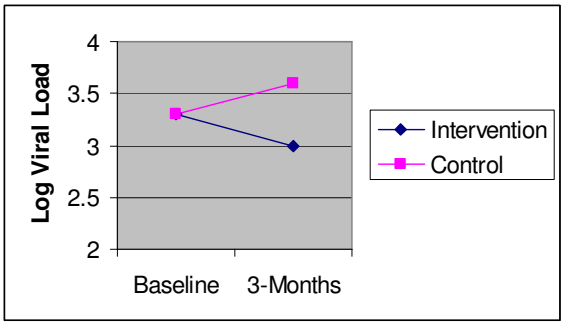
Comparison (Education) Condition

The comparison condition consists of eight individual sessions with health educators, using videotapes which provide education around HIV, alcohol use, and Hepatitis C, followed by a structured discussion of the information covered.

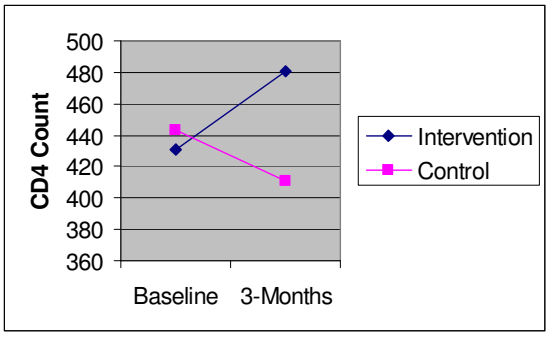
Adherence Results

- At baseline, the two groups did not differ significantly in their viral load or CD4 counts.
- At 3-months post-intervention, there was a **significant time x condition interaction.**
- Compared to the comparison group, intervention participants demonstrated:
  - significant **decreases in viral load**
  - significant **increases in CD4 count**

Adherence Results



Adherence Results



Adherence Results

Effects of Intervention on Indicators of Clinical Progression at 3 Month Follow-Up

	Intervention %	Education %	Odds Ratio (95% CI)	p
.3 or greater reduction in log viral load	44.9%	20.3%	3.2 (1.4-7.2)	.004
10% or greater increase in CD4 count	30.6%	11.9%	3.3 (1.3-8.5)	.013

Adherence Results

Variable		Baseline	3-Months
Percent Dose Adherence			
	Intervention	78.0%	92.7%
	Education	85.1%	89.4%
Percent Day Adherence			
	Intervention	74.1%	91.7%
	Education	80.4%	87.3%

Drinking Results

- Participants in both conditions reported significant decreases in the number of standard drinks and the number of drinks per drinking day from baseline to 3 months.
- There were no significant time by condition interaction effects for these variables.

Results at 6 months

- At the 6-month follow-up visit, **there were no significant differences** between individuals in the intervention and comparison condition on any outcome variable for adherence or drinking.
- Self-reported adherence remained high among participants in both conditions.
- Drinking remained lower in both groups.

Summary

- The results from Project PLUS clearly demonstrate the efficacy of an intervention that integrates Motivational Interviewing and Cognitive Behavioral Skills Building to improve adherence (clinical outcomes and self-report) and drinking among HIV+ heavy drinking men and women.
- This is the first behavioral intervention to document efficacy across viral load, CD4 count, and self-reported adherence.

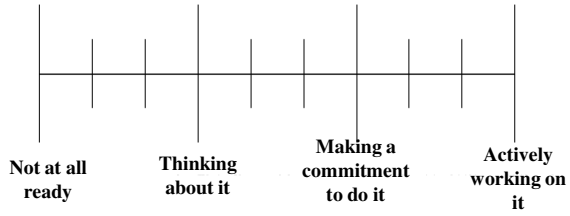
Summary

- Both the intervention and the educational sessions were equally efficacious in reducing drinking behaviors.
- The reduction in the magnitude of the intervention's efficacy at 6-month follow-up indicates the importance of intervention booster sessions.
- Heavy drinking HIV+ persons are at significant risk of medication adherence issues, and are a group that may require targeted and individualized intervention strategies.

How can you use some of this with your patients

Staging Exercise

On the following scale, which point best reflects how ready you are at the present time to **take your HIV medications 100% as prescribed?**



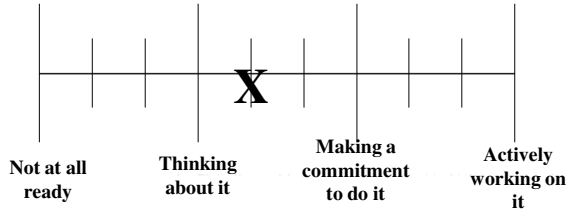
The Staging Ruler

- First, the ruler gives you an idea of where the client is, and what you have to work with
- You can take one of two different approaches ….

Motivational Interviewing

Staging Exercise

On the following scale, which point best reflects how ready you are at the present time to **take your HIV medications 100% as prescribed?**



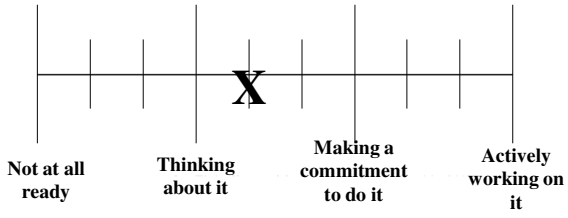
So, you're about a 5, how come you're not a 10?

- Taking the meds all the time is just too hard.
- I forget, and I'm not sure I can always remember.
- I have other things going on in my life besides HIV, you know!
- The side effects make me not want to take them all the time.
- I'm healthy and feeling fine, so why do I need to take them all the time?

TRANSTHEORETICAL MODEL

Staging Exercise

On the following scale, which point best reflects how ready you are at the present time to **take your HIV medications 100% as prescribed?**



So, you're about a 5, how come you're not a 1?

- Because I'm trying really hard to take my meds.
- Staying healthy is important to me.
- I don't want to see my viral load go up again.
- I need to be around for my kids. If I get sick, who will take care of them?
- I'm committed to being undetectable.

Overshooting versus Undershooting

- Taking the meds all the time is just too hard.
- I forget, and I'm not sure I can always remember.
- I have other things going on in my life besides HIV, you know!
- The side effects make me not want to take them all the time.
- I'm healthy and feeling fine, so why do I need to take them all the time?
- Because I'm trying really hard to take all my meds.
- Staying healthy is important to me.
- I don't want to see my viral load go up again.
- I need to be around for my kids. If I get sick, who will take care of them?
- I'm committed to being undetectable.

Conclusions

- MI can be used to engage clients in a dialogue about their medication adherence and alcohol use, and to get a sense of their ambivalence.
- It can be used to help improve and increase engagement and retention to comprehensive HIV care.
- It can produce quick results for many behaviors.
- It gives you a way to work with clients who are not yet ready for change, but in a way that will maintain rapport and engagement, so you have another chance later.

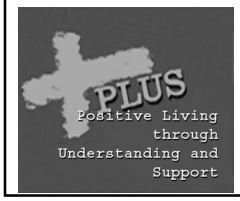
PLUS
Positive Living through Understanding and Support

Thanks!

jeffrey.parsons@hunter.cuny.edu

The PLUS Team

Principal Investigator:	**Jeffrey T. Parsons, Ph.D.**
Co-Investigator:	**Sarit Golub, Ph.D.**
Project Director:	**Elana Rosof, Ph.D.**
Project Coordinator:	**Catherine Holder, B.A.**
Clinical Supervisor:	**Bradley Thomason, Ph.D.**
Education Supervisor:	**Jose Nanin, Ed.D.**
Recruitment Director:	**Christian Grov, M.A.**
Graphic Designer:	**Chris Hietikko, M.F.A.**



Therapists: James Kelleher, Juline Koken, Anna Levy-Warren, Paris Mourgues, Laura Travaglini, Laila Spina

Educators/Assessors: Anthony Bamonte, Lorelei Bonet, Justin Brown, Lauren DiMaria, Charles Edwards, Julia Tomassilli, Brooke Wells