

BACKGROUND

- Predictors of long-term abstinence remain under-investigated yet are critical to elucidating the process of remission from substance use disorders, best conceptualized as a chronic condition.
- We documented the role of continuous 12-step meeting attendance in sustaining abstinence from polydrug use for 3+ years.¹
- Many substance users choose not to attend 12-step meetings or drop out after a short period of attendance.
- *Involvement* in 12-step activities (e.g., reading recovery literature, having a sponsor) enhances the likelihood of abstinence independently of meeting attendance among treatment-seeking persons.²
- There is a need to specify the elements of 12-step involvement that underlie its benefits and may be helpful independently of meeting attendance or even outside of the 12-step context.

STUDY OBJECTIVES

We examine:

1. The role of overall 12step involvement level in predicting *continuous abstinence sustained over three years* independently of meeting attendance; and
2. Gender differences in these processes.

OVERVIEW OF METHODS AND PROCEDURES

- New York City-based longitudinal investigation of factors predicting with stable abstinence.
- Media-recruited cohort in remission from one month to 10+ years.
- Yearly interviews up to three-year follow-up (F3).
- Study sample: 285 individuals who provided full dataset (83% of surviving BL cohort of 342).

MEASURES

CONTROL VARIABLES assessed at Baseline:

- Abstinence duration: Months since lasted using *any drug*.
- 12-step attendance: Number of AA + NA+CA meetings past year.

PREDICTOR DOMAINS assessed at baseline:

- Overall 12-step involvement level past year: Sum of nine 12-step suggested activities (see below)

- Individual 12-step recovery activities: having a sponsor, sponsoring someone, reading recovery literature, having a homegroup, considering oneself a 12-step member, doing service, working the steps, contacting 12-step members outside of meetings; socializing with other members outside of meetings.

OUTCOME:

Continuous abstinence from baseline to F3: No self-reported drug use since previous interview at one-, two- or three-year follow up (yes/no). *Biological corroboration of self report (hair or saliva): 84.4% concordance at F3.*

ANALYSES

- Chi-squares and one-way ANOVAs to examine gender differences in control, predictors and outcome variables.
- Logistics regressions to quantify the role of overall 12-step involvement and individual 12-step activities on subsequent abstinence among men and women.

Baseline Characteristics (N=285)	
Men	55.8%
Age (mean, SD)	43.5 (8.1)
Race/ethnicity	
African American	63.6%
Caucasian	15.9%
Mixed/other	20.5%
Hispanic origin	17.2%
Primary income	
Job on/off the books	35.7%
Govt. assistance	59.8%
Other legitimate income	4.5%
HIV+	23.4%
Hep C	30.8%
Psychiatric disorder (ever)	39.9%

Primary Substance	
Crack	59.6
Heroin	17.4
Cocaine	9.9
Alcohol	7.8
Other	5.3

Generally Long and Severe History of Polysubstance Use

Years regular use of drugs, Mean= 18.7 (St. Dev= 12.0)

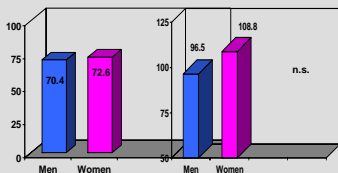
Baseline Substance use history by Gender

	Male N=159	Female N=126
BL abstinence in months	33.1	29.8 n.s.
Previous attempt to quit (%)	68.5	68.8 n.s.
Lifetime dependence Severity ³	11.7	11.7 n.s.
Ever treatment at baseline %	81.8	89.7 †
Ever 12-step at baseline %	88.1	91.3 n.s.

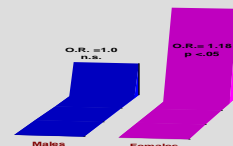
†p < .1 [trend] p < .05

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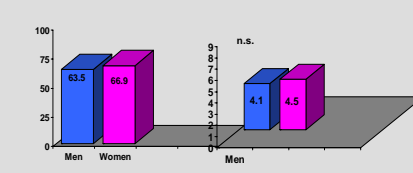
Past year 12-step attendance at baseline: Percent and number of meetings attended among attendees



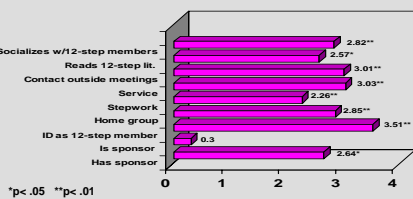
Odds of sustained abstinence over 3 years as a function of baseline 12-step involvement level controlling for baseline abstinence duration and 12-step meeting attendance



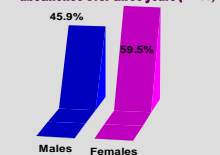
'Any' 12-step involvement past year at baseline and involvement level



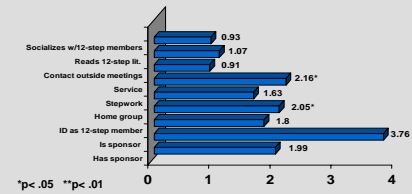
Odds of sustained abstinence over 3 years for individual 12-step activities at baseline controlling for baseline abstinence duration: AMONG WOMEN



Percent sustained continuous drug abstinence over three years (P < .05)



Odds of sustained abstinence over 3 years for individual 12-step activities at baseline controlling for baseline abstinence duration: AMONG MEN



Odds of sustained abstinence as a function of individual 12-step activities at baseline by gender. Controlling for baseline abstinence duration and 12-step attendance level

Repeating the above regressions with number of 12-step meetings attended in the pre-baseline year as an added control variable, the following 12-step activities significantly (p < .05) enhanced the odds of sustained abstinence *independently of baseline abstinence duration and of 12-step meeting attendance*:

•MEN: None

•WOMEN (in descending order of magnitude): Identifying as a 12-step member; Doing service; Contacting other members outside of meetings; Socializing with 12-step members; Having a home group; and Having a sponsor.

SUMMARY OF FINDINGS

•There were no gender differences in substance use history, prior exposure to treatment, 12-step attendance or involvement in this formerly severely drug-dependent inner city sample.

•Yet women were significantly more likely than men to sustain abstinence over three years.

•12-step involvement level at baseline significantly predicted continuously sustained drug abstinence over three years independently of meeting attendance *among women but not among men*.

•Some of the individual 12-step activities associated with sustained abstinence among women are specific to the 12-step context (Identifying as a 12-step member, having a sponsor and a home group), but others may also benefit persons who choose not to affiliate with 12-step: Helping others (Doing service), having contact and socializing with individuals in recovery.

IMPLICATIONS

•Whenever feasible, 12-step involvement should be encouraged in addition to 12-step meeting attendance to sustain abstinence, especially among women.

•A number of 12-step activities can also be 'translated' outside of 12-step recovery for persons who select not to affiliate with 12-step (e.g., volunteering, spending time with other persons in recovery regardless of 12-step affiliation).

•More research is needed to determine the benefits of such activities outside of the 12-step context in sustaining abstinence and promoting sustained recovery.

REFERENCES

- [1] Laudet, A. and White, W. (2007) Predicting sustained remission from polysubstance use: A three-year follow-up study. CPDD [2] Timko C, Debenetti A. A randomized controlled trial of intensive referral to 12-step self-help groups: One-year outcomes. *Drug Alcohol Depend.* 2007;90:270-9. [3] Sheehan D, et al., The Mini International Neuropsychiatric Interview: J Clin Psychiatry, 1998;59:22-33.