

The Role of Drug Use in Brief Alcohol Interventions: A Multi-Ethnic/Racial Analysis

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**Brief Intervention to Reduce Injuries in Minorities
National Institute on Alcohol Abuse and Alcoholism
R01-AA-013824 (PI: Caetano)**

**Level I
Trauma Patients**

Screen Positive

**Randomized
by Ethnicity**

**Treatment as Usual
with Assessment
TAU+**

6 Month Follow up

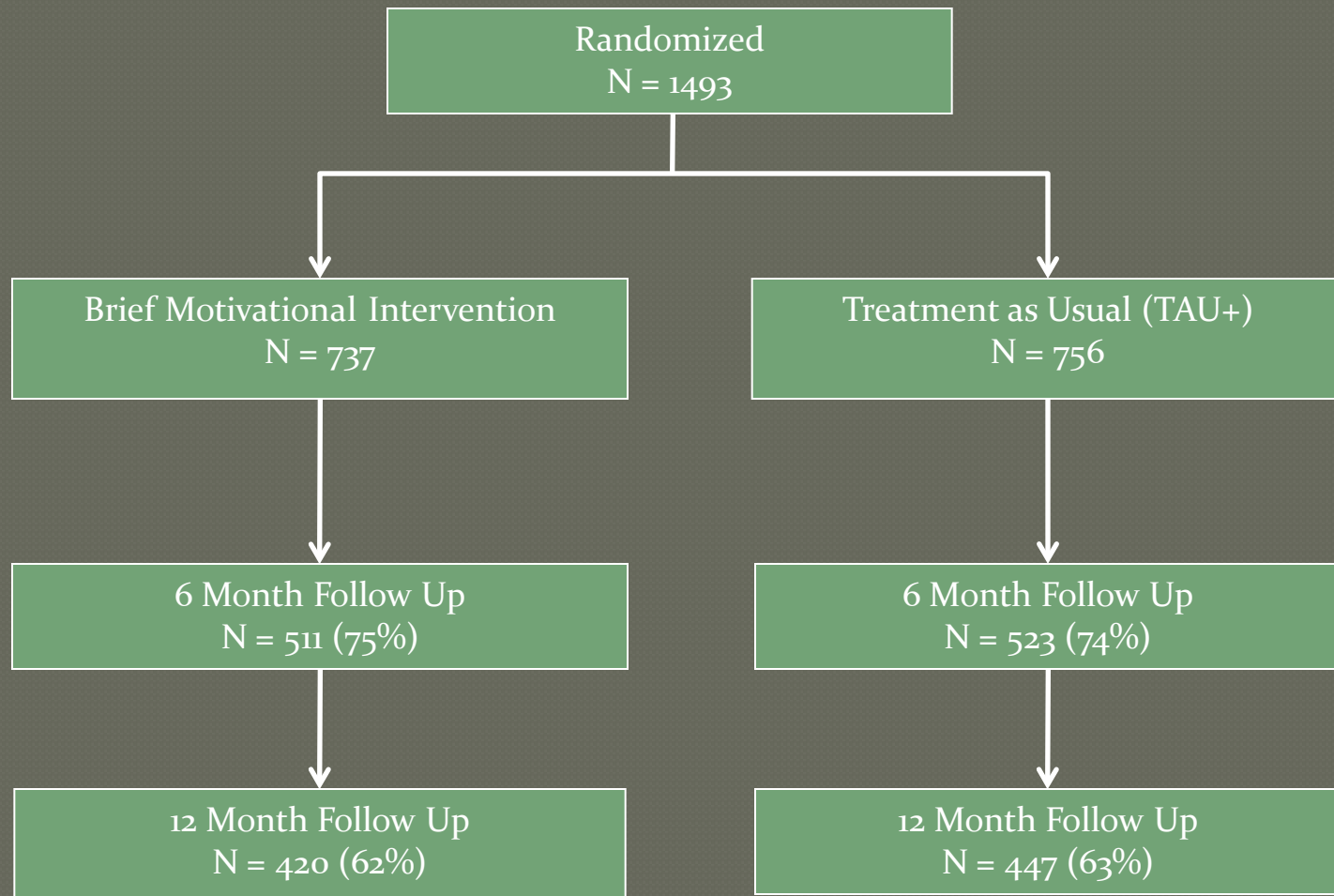
12 Month Follow up

**Brief Motivational
Intervention
BMI**

6 Month Follow up

12 Month Follow up

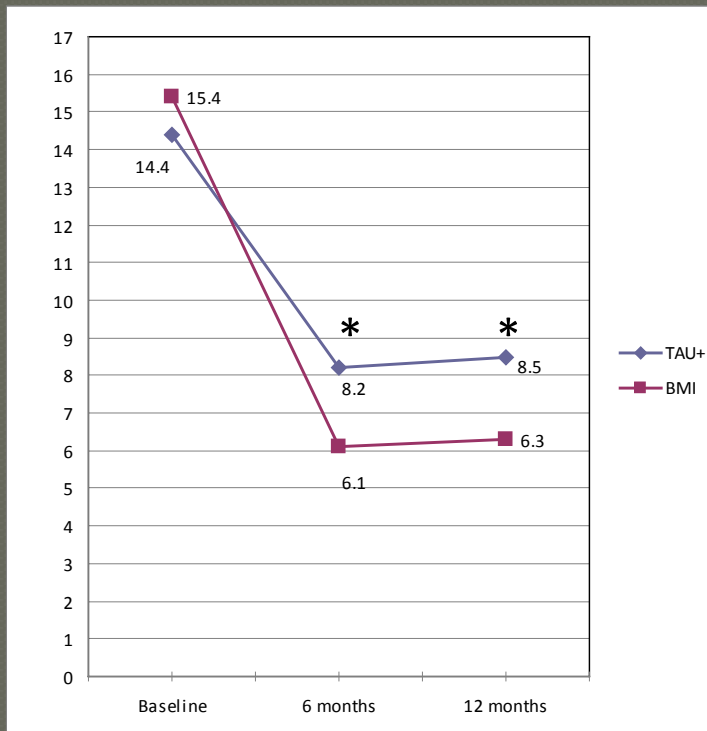
Randomization & Follow up



Ethnic differences in drinking outcomes following a brief alcohol intervention in the trauma care setting

Craig A. Field^{1,2}, Raul Caetano³, T. R. Harris³, Ralph Frankowski³ & Bahman Roudsari³

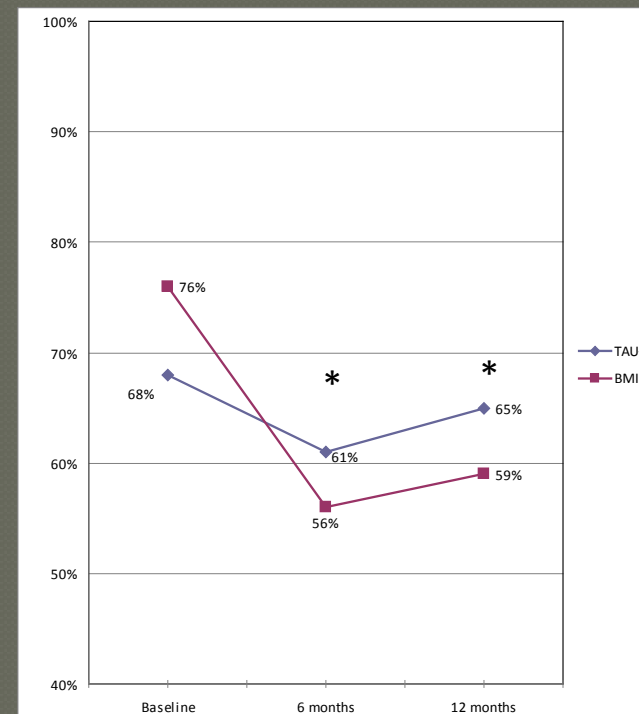
Addiction, 105, 62–73



Maximum Amount

$$d_6 = .29$$

$$d_{12} = .30$$



% Days Heavy Drinking

$$d_6 = .26$$

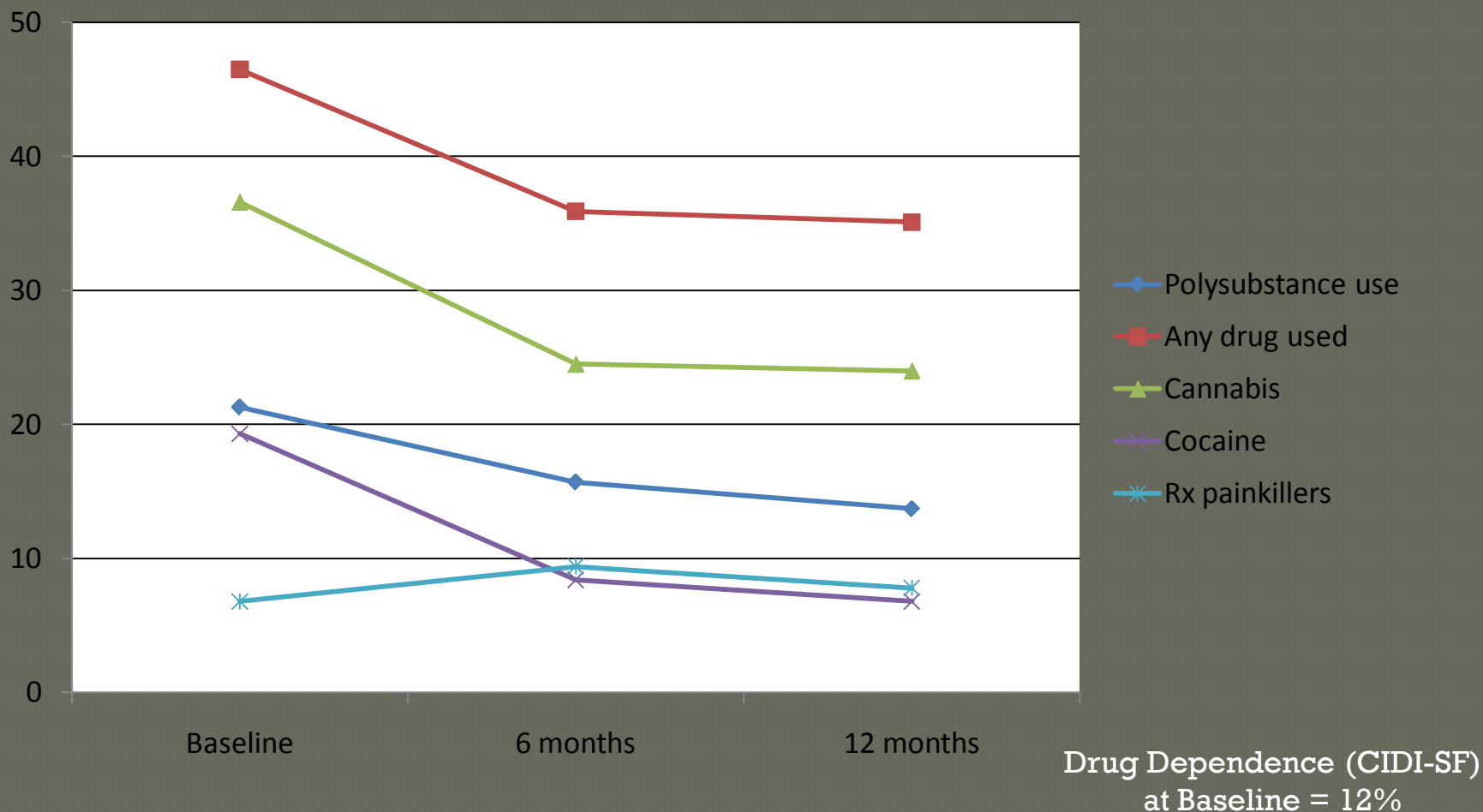
$$d_{12} = .24$$

Secondary Analysis

1) What is the impact of drug dependence at baseline on drinking outcomes following brief alcohol intervention for at-risk drinkers?

2) What is the impact of brief alcohol interventions for at risk drinkers on drug use?

Drug Use Among Participants*



* No significant intervention effect

Average volume per week

Hispanics*		Effects	β	SE	p
	6 months	BMI	-0.27	0.23	0.24
		Drug dependence	0.36	0.52	0.48
		BMI \times drug dependence	-1.92	0.77	0.01
	12 months	BMI	-0.41	0.24	0.09
		Drug dependence	1.18	0.54	0.03
		BMI \times drug dependence	-2.71	0.86	0.00

* Main effects and interaction effects for non-Hispanics were not significant.

Maximum amount

Hispanics*		Effects	²	SE	p
	6 months	BMI	-0.30	0.14	0.03
		Drug dependence	0.46	0.31	0.14
		BMI × drug dependence	-1.08	0.46	0.02
	12 months	BMI	-0.34	0.15	0.02
		Drug dependence	0.93	0.33	0.01
		BMI × drug dependence	-1.62	0.52	0.00

* Main effects and interaction effects for non-Hispanics were not significant.

Percent days abstinent

Hispanics*		Effects	β	SE	p
	6 months	BMI	-0.01	0.03	0.61
		Drug dependence	0.00	0.07	1.00
		BMI \times drug dependence	0.27	0.10	0.01
	12 months	BMI	-0.02	0.03	0.48
		Drug dependence	-0.07	0.07	0.32
		BMI \times drug dependence	0.41	0.11	0.00

* Main effects and interaction effects for non-Hispanics were not significant.

Conclusions

- Brief alcohol interventions targeting at risk drinking appeared to have no significant effect on drug use outcomes.
- The benefits of brief alcohol intervention do not appear to be *negatively* influenced by drug dependence.
- At least among Hispanics, drinking outcomes appear to be more favorable following brief alcohol interventions among those with drug dependence.

The effectiveness of brief intervention among injured patients with alcohol dependence: Who benefits from brief interventions?

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Ethnic differences in drinking outcomes following a brief alcohol intervention in the trauma care setting

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Addiction, 105, 62–73

The Role of Ethnic Matching Between Patient and Provider on the Effectiveness of Brief Alcohol Interventions With Hispanics

Craig Field and Raul Caetano

Limitations

- The current study is a secondary data analysis.
- Drug use and drug dependence were assessed but the parent study was not designed to test the hypotheses investigated herein.
 - Screening was not conducted to identify patients who use drugs and the brief intervention did not explicitly address drug use, per se.
 - Frequency of drug use was not assessed.
- **These results may not be generalizable to settings other than the trauma care setting.**

Injury & Drug Use: Another Perfect Storm

- Drug abuse and dependence are significantly greater among men than among women and inversely related to age (Comptom, 2007).
- Cherpitel (2008) observed a significant upward trend for drug-related ED visits from 1995 to 2005 (0.6% in 1995 to 3.7% in 2005; $p < 0.01$).
- In medical records from nearly 1 million injured patients provided care at more than 250 trauma centers over a six year period...*Injured patients were less likely to be tested for drugs, but more likely to have positive test results (London 2007).*
- Injured patients who use drugs have more severe injuries, significantly higher rates of complications and require longer hospitalizations (Levy et al., 1996; Rootman et al, 2007; Cowperthwaite & Burnett, 2011).

Multidisciplinary Approach to Reduce Injury and Substance Abuse
funded by
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**Screening, Brief Intervention and Referral for Treatment
for Drug Abuse in Medical Settings**

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Drug Use among Hispanics and Non-Hispanics

		Hispanic		non-Hispanic		p value	OR (95%CI)
		n	%	n	%		
Drug use							
	Any Drug Use	212	39.5	482	50.5	0.00	0.64 (0.52-0.79)
	Cannabis	149	27.8	397	41.6	0.00	0.54 (0.43-0.68)
	Cocaine	114	21.3	173	18.2	0.14	1.22 (0.94-1.59)
	Rx painkillers	21	3.9	80	8.4	0.00	0.45 (0.27-0.73)
Polysubstance use		88	16.5	228	24.0	0.00	0.63 (0.48-0.82)
Drug dependence		52	9.7	119	12.5	0.11	0.75 (0.53-1.06)

The effectiveness of brief intervention among injured patients with alcohol dependence: Who benefits from brief interventions?

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A B S T R A C T

Background: Research investigating the differential effectiveness of Brief Motivational Interventions (BMIs) among alcohol-dependent and non-dependent patients in the medical setting is limited. Clinical guidelines suggest that BMI is most appropriate for patients with less severe alcohol problems. As a result, most studies evaluating the effectiveness of BMI have excluded patients with an indication of alcohol dependence.

Methods: A randomized controlled trial of brief intervention in the trauma care setting comparing BMI to treatment as usual plus assessment (TAU+) was conducted. Alcohol dependence status was determined for 1336 patients using DSM-IV diagnostic criteria. The differential effectiveness of BMI among alcohol-dependent and non-dependent patients was determined with regard to volume per week, maximum amount consumed, percent days abstinent, alcohol problems at 6 and 12 months follow-up. In addition, the effect of BMI on dependence status at 6 and 12 months was determined.

Results: There was a consistent interaction between BMI and alcohol dependence status, which indicated significantly higher reductions in volume per week at 6 and 12 months follow-up ($\beta = -.56, p = .03$, $\beta = -.63, p = .02$, respectively), maximum amount at 6 months ($\beta = -.31, p = .04$), and significant decreases in percent days abstinent at 12 months ($\beta = .11, p = .007$) and alcohol problems at 12 months ($\beta = -2.7, p_{12} = .04$) among patients with alcohol dependence receiving BMI. In addition, patients with alcohol dependence at baseline that received BMI were .59 (95% CI = .39-.91) times less likely to meet criteria for alcohol dependence at six months.

Conclusions: These findings suggest that BMI is more beneficial among patients with alcohol dependence who screen positive for an alcohol-related injury.

On the one hand...

Drug and Alcohol Dependence 77 (2005) 4

Brief motivational intervention at a clinic visit reduces cocaine and heroin use

Judith Bernstein^{a,c}, Edward Bernstein^{a,b,*}, Katherine Tassiopoulos^b,
Timothy Heeren^d, Suzette Levenson^e, Ralph Hingson^b

ER

Drug and Alcohol Dependence 99 (2009) 280–295

www.elsevier.com/locate

Screening, brief interventions, referral to treatment (SBIRT) (BIRT) for
illicit drug and alcohol use at multiple sites:
Comparison at intake and 6 months later

Bertha K. Madras^{a,*}, Wilson M. Compton^b, Deepa Avula^c, Tom Stegbauer^c,
Jack B. Stein^c, H. Westley Clark^c

On the other hand...

Journal of Consulting and Clinical Psychology
2007, Vol. 75, No. 4, 556–567

Site Matters: Multisite Randomized Trial of Motivational Enhancement Therapy in Community Drug Abuse Clinics

Samuel A. Ball
Yale University School of Medicine
and the APT Foundation, Inc.

Steve Martino, Charla Nich, and
Tami L. Frankforter
Yale University School of Medicine

Journal of Consulting and Clinical Psychology
2009, Vol. 77, No. 5, 993–999

A Multisite Randomized Effectiveness Trial of Motivational Enhancement Therapy for Spanish-Speaking Substance Users

Kathleen M. Carroll, Steve Martino, Samuel A. Ball,
Charla Nich, Tami Frankforter, Luis M. Anez,
and Manuel Paris
Yale University School of Medicine

Lourdes Suarez-Morales and José Szapocznik
University of Miami

Conclusions

- The evidence from this secondary data analysis suggest that, at least among Hispanics, drinking outcomes appear to be more favorable following brief alcohol interventions among those with drug dependence.
- Hispanics benefited significantly from brief intervention in comparison to treatment as usual (Field & Caetano, 2010; Field et al., 2010).
- Patients with alcohol dependence who received brief intervention showed significant improvements in drinking outcomes in comparison to treatment as usual (Field & Caetano, 2010).
- Taken together, it appears that, at least among injured patients, brief alcohol interventions may be more beneficial among those with more severe substance abuse problems.

Screening & Enrollment

