

Screening, Brief Intervention and Referral to Treatment in an ED: Three-Month Outcomes of a Randomized Controlled Trial Among Mexican-Origin Young Adults

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Background

- In the U.S., young adults have the highest rates of alcohol consumption and alcohol-related problems
- 41% of those 18-25 reported heavy episodic drinking in the previous month
- Alcohol-related injury is on the increase in this age group
- Alcohol problems have been found to disproportionately affect Mexican-origin adults
- Highest rates of alcohol problems among Mexican-origin adults are on the border



Purpose of the Study

To test the efficacy of SBIRT for at risk and dependent drinking among Mexican-origin young adult (18-30) ED patients at the U.S. – Mexico border.



The Intervention

- Brief Negotiation Interviewing (BIN) (Bernstein's Project ASSERT) was used following the FRAMES model (Miller)
- Promotores, health promotion advocates indigenous to the Mexican-American community, were trained as interventionists
 - Bilingual lay individual from the community who had been previously used in other health promotion activities
 - Had established rapport in the community and were view as culturally appropriate
 - Intervention model would be relatively low cost and would promote sustainability of the intervention in the ED following the study

Eligibility Criteria/Screening Variables

- ED patients 18 30 years old (Mexican-origin identity)
- Positive on RAPS4 (as indicator of alcohol dependence) or
- I5 or more drinks (8 or more females)/week during last year

or

- 5 or more drinks (4 or more females) on an occasion in last 30 days
- Not presently in treatment for problem drinking



Study Design

- Data collected over a period of 17 months (November 2010 to April 2012), 4:00 to midnight, 7 days a week
- Of target population 51% were screened
- 27% screened positive (n=850)
- 698 patients recruited (82%)
- Randomized into three groups (two-stage process)
 Screened only 78
 Assessed 310
 Intervention 310



Three-Month Follow-Up

Three-month follow-up (74%)

- Assessed (76%) n=237

- Intervention (72%) n=223

Baseline Assessment Variables

- BAC (breathalyzer)
- Reason for the ER visit (injury vs. medical problem)
- Self-reported drinking within six hours prior to event
- Causal attribution of the event to drinking
- 28-day Timeline Followback (number of drinking days per week, drinks per drinking day, maximum drinks per occasion)
- Short Inventory of Problems (SIPs + 6) 12 & 3 months (6 questions related to injury and drinking and driving)
- Risk taking/impulsivity and sensation seeking
- Readiness and Stage of Change



Three-Month Follow-Up Variables

- RAPS4
- 28-day Timeline Followback
- At-risk drinking (15/8 + drinks/week; 5/4 + drinks/ drinking day)
- Alcohol treatment last 3 months
- Short Inventory of Problems (SIPs + 6) last 3 months
- Readiness and Stage of Change

Demographic Characteristics by Treatment Condition (%)

	Assessed (237)	Intervention (223)	
Injured	38	35	
Male	51	58	
Age			
18-20	18	24	
21-24	35	36	
25-30	47	40	
Born in the US	81	76	



Screening Characteristics by Treatment Condition

	Assessed (237)	Intervention (223)
RAPS 4+ (%)	40	37
At-risk Drinking (%)	76	74
Drinking Days/week	1.11	1.02
Drinks/Drinking Day	6.1	5.7
Max. Drinks/Occasion (last month)	8.6	7.8



Assessment Characteristics at Baseline by Treatment Condition

	Assessed (237)	Intervention (223)
Drinking 6 hrs before (%)	12	15
Causal Attribution (%)	5	8
Mean Neg Consequence	2.6	2.3
Mean Ready to Change	6.8	6.9
Mean Risk Taking	14	13

Changes in Drinking Screening Characteristics at 3 month follow-up



*p < .05

Change in Drinking Assessment Characteristics at 3-Month Follow-up





Results

At 3-month follow-up both groups showed significant decreases in all outcome variables

- Proportion positive on the RAPS4
- Proportion positive for risky drinking
- Drinking days per week
- Drinks per drinking day
- Maximum drinks per occasion
- Negative consequences of drinking



Results

- Using analysis of covariance, controlling for baseline measures (and demographic characteristics) the intervention group was significantly lower than the assessed group on:
 - Risky drinking
 - Drinks per drinking day
 - Maximum drinks on an occasion
 - Negative consequences of drinking (SIPS+6)



Results

- Using generalized estimating equation (GEE) modeling to examine significant differences in the degree of change from baseline to three months between the intervention and assessed groups, no differences were found for any of the outcome variables.
- The intervention group did show a larger change in all outcome variables compared to the assessed group but this difference was not significant.



Using both ANCOVA and GEE modeling, examined interaction of brief intervention on drinking outcomes by:

- Injury status
- Self-report
- Causal attribution
- Readiness to change
- Risk taking



No interaction effects found except for causal attribution:

Significantly greater decrease in number of consequences of drinking found for those attributing a causal association of their drinking with the event



Summary and Conclusions

- The sample exhibited infrequent but heavy episodic drinking
- 75% met criteria for at-risk drinking and 38% screened positive for alcohol dependence
- SBIRT appears to have been successfully translated in this sample of young adult Mexican-origin ED patients at the U.S.-Mexico border, using lay promotores to deliver the intervention



Future Research

- No difference was found for language in which the intervention was delivered (English vs. Spanish)
- Have taped interviews in both languages and hope to examine these for any differences in active ingredients of the intervention
- Need further research to examine the efficacy of brief intervention in emergency department settings for special populations and groups