

Screening and Brief Intervention (SBI) in the Emergency Department Among Mexican-Origin Young Adults: 12-Month Outcomes of a Randomized Controlled Clinical Trial

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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 Mexicanorigin adults are on the border



Purpose of the Study

To test the efficacy of SBI for at-risk and dependent drinking at 12-month follow-up among Mexican-origin young adults (18-30) in the emergency department 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



- ED patients 18 30 years old (Mexican-origin identity)
- Positive on RAPS4 (as indicator of alcohol dependence) or
- 15 or more drinks (8 or more females)/week during last year or
- 5 or more drinks (4 or more females) on an occasion in last30 days
- Not presently in treatment for problem drinking



Study Design

- Data collected over a period of 17 months (November 2010 April 2012), 10:00 am to 10:00 pm, 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)



Patient Recruitment and 12 Month Follow-Up

Baseline

Screened only n=78 (discontinued at 12 months)

Assessed n=310

Intervention n=310

12-month follow-up

Screened (72%) n=56

Assessed (78%) n=243

Intervention (75%) n=231



Baseline Assessment Variables

- Reason for the ER visit (injury vs. medical problem)
- Self-reported drinking within six hours prior to event
- 28-day Timeline Followback (number of drinking days per week, drinks per drinking day, maximum drinks in a day)
- Short Inventory of Problems (SIPs + 6)
 (6 questions related to injury and drinking and driving)
- Risk taking/impulsivity and sensation seeking



12-Month Follow-Up Variables

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



	Screened (78)	Assessed (310)	Intervention (310)	
Male	53	54	58	
Age (mean)	24	24	24	
Born in the US	-	82	77	

Baseline Screening and Assessment Characteristics by Treatment Condition

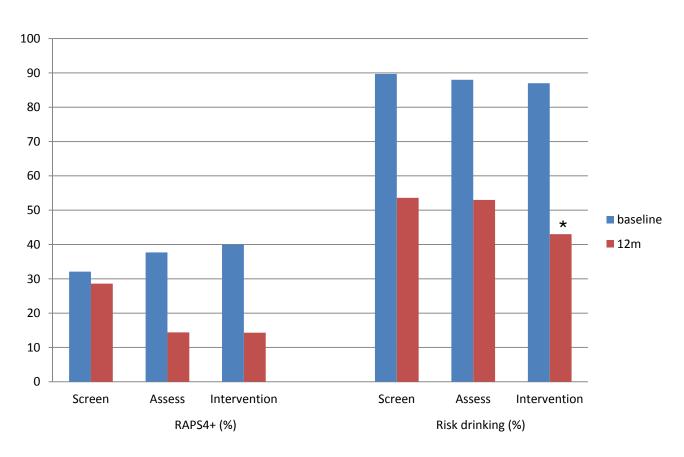
	Screened (78)	Assessed (310)	Intervention (310)	
RAPS 4+ (%)	32	38	40	
At-risk Drinking (%)	90	88	87	
Drinking Days/week	-	1.06	1.12	
Drinks/Drinking Day	-	6.2	6.0	
Max. Drinks/Occasion				
(last month)	-	8.5	8.5	
Negative consequence	-	3.5	3.5	



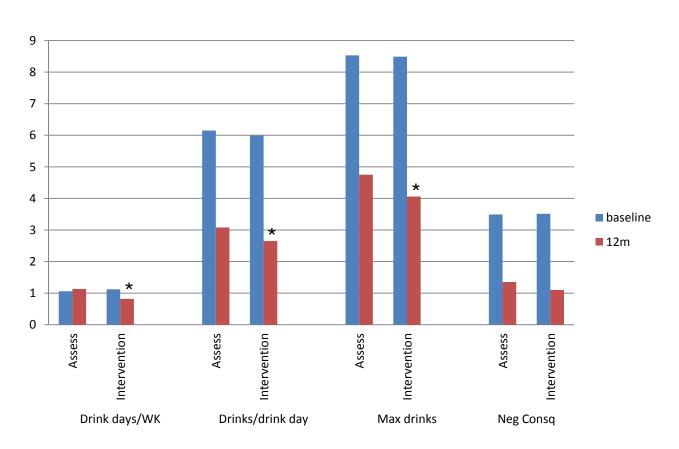
Baseline Assessment Characteristics by Treatment Condition

	Assessed (310)	Intervention (310)
Injured (%)	38	34
Drinking 6 hrs before (%)	14	18
Mean Risk Taking (0-30)	14	13

Changes in Screening Characteristics at 12-Month Follow-up (controlling for gender, age, nativity)



Changes in Assessment Characteristics at 12-Month Follow-up (controlling for gender, age, nativity)





- Using Random Effects Modeling, controlling for gender, age, nativity, and baseline values, improvement in drinking outcomes was significantly greater for the intervention compared to the assessed condition for
 - At-risk drinking
 - Drinking days per week
 - Drinks per drinking day
 - Maximum drinks in a day



Differential Intervention Effects by Potential Effect Modifiers

		Disease type		Acute drinking		Risk Taking	
	Injury	Med	Yes	No	Higher	Lower	
RAPS 4+ (%)	-0.01	-0.27	-0.03	-0.09	-0.53	0.14	
At-risk Drinking (%)	-0.02	-0.89	-1.43	-0.44	-0.54	-0.68	
Drinking Days/week	- 0.18	-0.17	-0.48	-0.10	-0.22	-0.15	
Drinks/Drinking Day							
Dillika/Dillikilig Day	-0.06	-0.26	-0.44	-0.13	-0.05	-0.25	
Max. Drinks/Occasion			-				
(last month)	-0.07	<mark>-0.35</mark>	-0.59	-0.16	-0.16	-0.28	
Negative consequence	-0.14	-0.10	-0.40	-0.03	-0.22	-0.06	
1094110	0.11	0.10	0.10	0.00	0.22	0.00	



Summary: At 12-Month Follow-up

- Assessment and intervention conditions both showed significant decreases in all outcome variables except in drinking days per week for the assessment condition
- Intervention condition showed significantly greater improvement in all outcomes compared to the assessment condition, except for the RAPS4 and negative consequences
- Little evidence of assessment reactivity



Subgroup Analysis for Intervention Condition

- Improvement in 12-month outcomes was greater for
 - Non-injured compared to injured patients
 - Those who reported drinking prior to the event compared to those who did not
 - Those lower on risk taking disposition



Discussion

- The sample exhibited heavy episodic drinking (fiesta drinking style) common in this group
- Findings may not be generalizable to other cultures with more frequent heavy drinking patterns.
- Social desirability bias is also especially relevant in this population, with a cultural emphasis on harmony in relationships and strong respect and obedience in relation to authority figures (among those who spoke only Spanish, the action plan to change was viewed as an actual doctor's prescription)



Conclusions

- Data suggest the efficaciousness of promotores in delivering brief intervention in this population of young adult Mexicanorigin patients in the ED
- These community-based health promotion advocates may provide a greater likelihood for ongoing implementation of SBI in the ED setting than ED staff who have limited time and competing priorities