Screening and Treatment of Alcohol Use Among Depression Patients

Derek Satre, PhD, Stacy Sterling, MPH, MSW, Kevin Delucchi, PhD, Felicia Chi, MPH, Constance Weisner, DrPH

University of California, San Francisco Department of Psychiatry and Kaiser Division of Research

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Clinical Concerns About Alcohol Use During Depression Treatment

Alcohol is a CNS depressant

- Fatigue
- Reduced speed of processing
- Sleep and appetite disturbance

Potential medication interactions

- Sedation
- Accident risk
- Enhances intoxication
- Reduced efficacy

High risk of drinking problem escalation in depressionIncreased suicide risk

Additional Service Issues

- Patients with co-occurring alcohol problems often seek treatment in mental health settings first
- Patients may not understand how alcohol use affects depression
- Identification rates in mental health are low, and alcohol treatment often is not integrated
- Early treatment can prevent problem escalation (SBIRT public health approach)

Investigating Alcohol Use

To determine the extent and levels of alcohol use in outpatient psychiatry

- Patterns of hazardous drinking
- Risk factors and motivation to reduce use
- Improve screening in the clinics
- Broader than dependence

Test an intervention to reduce alcohol use

- Feasibility and outcomes
- Initial study prior to conducting a larger trial

UCSF Adult Psychiatry Clinic

 General outpatient psychiatric services and several specialty clinics
 Mostly privately insured, Medicare or self-pay
 Primary substance problems pre-screened at telephone intake and referred elsewhere

Electronic Health Inventory

- To improve alcohol and drug problem identification and develop a research tool
- The Electronic Health Inventory (EHI) is a selfadministered survey
 - On desktop computers in clinic waiting area (and in PHP)
 - Developed in 2005-2006 with support of the Psychiatry Department
- Collects data on health, substance use, pain, BDI-II
 Recruits patients for the departmental research registry

Heavy Drinking Risk and Motivation Study

- Included all patients ages 18+ who scored 10+ on BDI-II (N=1183)
- Heavy episodic drinking (5+) in the past year was reported by 47.5% of men and 32.5% of women
- Regression models:
 - Factors associated with prior year 5+ drinking
 - Factors associated with motivation to reduce drinking
 Demographic factors, depression, health status

Satre, Chi, Eisendrath & Weisner, 2011, Alcohol. Clin. Exp. Research

Predictors of prior-year heavy episodic drinking

Variable	OR	95% CI	p_
Younger age	0.98	(0.97, 0.99)	.011
Male gender	1.88	(1.38, 2.54)	.001
Married	0.98	(0.72, 1.33)	.888
Health status	1.03	(0.75, 1.42)	.861
BDI-II score	1.00	(0.99, 1.02)	.658
Smoking	1.63	(1.20, 2.23)	.002

Predictors of alcohol problem recognition among depression patients

<u>Variable</u>	В	SE B	<u>p</u>
Age in years	0.06	0.02	.008
Gender (female)	-0.12	0.59	.836
Married/partnered	-0.67	0.65	.304
BDI-II score	0.01	0.03	.781
Self-reported health	0.61	0.65	.347
Usual alc. quantity	0.57	0.15	.000
SMAST score ≥ 3	7.16	0.72	.000

Satre, Chi, Eisendrath & Weisner, 2011, Alcohol. Clin. Exp. Research

Depression Intake Study Summary Points

- Risk factors for heavy drinking in depression are similar to general population studies
 Younger age, male, smokers
- Depression severity and poor health don't seem to increase motivation to reduce drinking
- Those reporting higher drinking quantities or alcohol-related problems also want to cut back
 Good intervention opportunity in psychiatry

Aims of Pilot MI Study

- Demonstrate feasibility of providing MI as an adjunct to usual care for depression
- Test efficacy of MI in reducing hazardous drinking

Control group given brochure on alcohol use risks
 Examine factors associated with reducing use
 Test impact on depression symptoms

Intervention Format

One in-person MI session
Two 20-minute phone calls

10 days after first session
40 days after first session

Adjunct to usual depression care

Usual care tracked to use as covariates

Follow-up Interviews

- Telephone-based
- Conducted by research assistant
- 3 and 6 months after final telephone session
 Follow-up was 95% at 3 months, 97% at 6month interview

Baseline Demographic Characteristics (N=104)

- **64%** Female
- Mean age = 42 (sd = 13.7)
- Marital Status
 - Single 65%
 - Sep/div. 21%
 - Married 13%
- **Ethnicity**

White	83%
Latino	7%
Black	6%
Asian	2%
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- Highest degree
 ≤ HS 14%
 AA 14%
 BA 45%
 MA 17%
 - JD/doc 10%
- **Employment**
 - Employed 46%
 - Unempl. 27%
 - Retired 12%
 - Student 15%

• Other 2%

Baseline Clinical / Substance Use

- Mean BDI-II = 25 (10.5)
- 71% report 3+ drinking days (prior month)
 Mean = 6.0 (5.6) days
- 29% reported other substance use, mainly cannabis
- No significant differences between groups in usual care received

Hazardous Drinking at Baseline, 3- and 6-Month Follow Up

	MI (n=37)	Control (n=36)	X2 or t
Any 3+ drinking days (%)			
Baseline	100	100	0
3 Months	60	82	3.9*
6 Months	58	72	1.5
Usual drinking quantity			
Baseline	2.7 (1.5)	2.7 (1.0)	0.1
3 Months	2.3 (0.9)	2.2 (1.3)	0.5
6 Months	1.8 (1.2)	2.2 (1.3)	1.4
Usual drinking frequency			
Baseline	12.9 (8.3)	12.2 (7.8)	0.4
3 Months	9.3 (8.0)	8.5 (6.8)	0.4
6 Months	9.5 (8.1)	10.0 (9.0)	0.3

Questions refer to alcohol consumption in the previous 30 days. * $\underline{p} < .05$.

Depression and Functional Outcomes

MI (52) Control (n=52)		X2 or t	
24.8 (9.6)	24.6 (11.3)	0.1	
20.3 (12.0)	20.8 (11.8)	0.2	
17.4 (11.4)	18.3 (12.4)	0.4	
50.0 (12.2)	51.1 (12.8)	0.4	
49.1 (12.0)	49.3 (12.8)	0.1	
48.3 (11.8)	50.4 (12.1)	.09	
28.7 (11.2)	29.3 (10.2)	0.3	
35.5 (10.9)	34.0 (13.4)	0.4	
36.4 (10.8)	35.3 (13.4)	0.5	
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Predictors of Reduction in Heavy Drinking at 6 months
Model: Age; gender; baseline BDI-II score, cannabis use, and readiness to reduce drinking; study treatment condition; any reported specialty care alcohol treatment

 The only significant predictor of lower rate of hazardous drinking was baseline drinking (p = .05)

 \Box Cox & Snell pseudo-R2 =.17, p=.010

Satre et al., in press, Journal of Substance Abuse Treatment.

Issues for Brief Intervention Research

- Study shows feasibility and good integration in a psychiatry setting
- Treatment effect over and above usual care + assessment and education given to controls
- Can MI improve depression adherence or appropriate utilization?

Current Study

- Larger RCT starting at Kaiser Permanente (Union City Department of Psychiatry, N= 300), R01 funded by NIAAA (R01 AA020463)
 - 230 of 300 participants enrolled
 - Age and diagnostic subgroups of risky drinkers responsive to MI (e.g., comorbid anxiety) up to 12 months, process measures
 - Test engagement with specialty alcohol care for patients with dependence
 - Impact on health care utilization (ER, inpatient)
 - Cost-effectiveness

Drug and Alcohol Research Team, Kaiser Division of Research

Investigators

Cynthia Campbell, PhD Jennifer Mertens, PhD Derek Satre, PhD Connie Weisner, DrPH, LCSW

Group Leader Stacy Sterling, MPH, MSW

Health Economist Sujaya Parthasarathy, PhD

Analysts

Felicia Chi, MPH Jessica Chung, PhD Andrea Kline Simon, MS Wendy Lu, MPH Tom Ray, MBA

Project Coordinators

Tina Valkanoff, MPH, MSW Agatha Hinman, BA Interview Supervisor Gina Smith Anderson

Research Associates Georgina Berrios Virginia Browning Diane Lott-Garcia Melanie Jackson Cynthia Perry-Baker Barbara Pichotto Martha Preble Lynda Tish Sabrina Wood

Research Clinicians Thekla Brumder, PsyD Ashley Jones, PsyD Amy Leibowitz, PsyD

Clinical Partners David Pating, MD

Charlie Moore, MD Matthew Tarran, PhD

KPNC Chemical Dependency Quality Improvement Committee KPNC Adolescent Medicine Specialists Committee KPNC Adolescent Chemical Dependency Coordinating Committee



