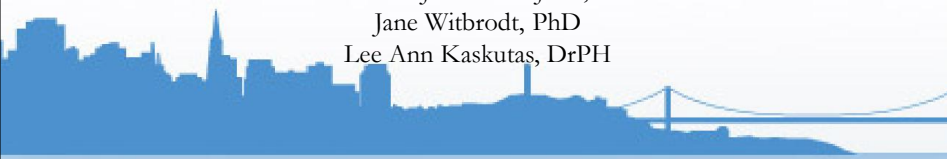




Effects of Distance to Treatment and Treatment Type on Alcoholics Anonymous Attendance and Subsequent Alcohol Consumption

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Presenter Disclosure

Jamie L. Heisey, MA

The following personal or financial relationships with commercial interests relevant to this presentation existed during the past 12 months:

No relationships to disclose



Presentation Overview

Introduction

- Importance of geography
- “Critical period” post treatment
- After-care, self-help, & Alcoholics Anonymous (AA)

Current study

- Sample
- Methods
- Results
- Implications
- Strengths & Limitations



Why is Geography Important?

- Neighborhood characteristics and geographic proximity may pose barriers to treatment
 - Distance to treatment affects utilization & retention¹
 - Travel lengths, clients' neighborhoods, crime rates affect continuity²



Post-Treatment

- “Critical period”: High risk of relapse and return to abusive drinking patterns³
- Chronic conditions may require several episodes of treatment and care over an extended period of time^{4,5}
- Importance of aftercare, follow-up, and self-help programs^{3,6}



Alcoholics Anonymous

- Formal treatment programs encouraging AA meeting attendance^{6,7}
 - Varying introduction & involvement during treatment
 - Inpatient clients participate in AA near treatment⁸
 - Outpatient clients may participate in AA groups closer to their home⁸



Research Questions

- 1) If inpatient clients are typically introduced to AA meetings close to their treatment facility, what happens to AA attendance rates once they complete treatment?
- 2) Is this different from people who live far away from their inpatient facility?



Research Questions

- 3) Does proximity to an outpatient facility affect clients' AA attendance rates post treatment?
- 4) Do differences in AA attendance by treatment type have subsequent effects on alcohol consumption post treatment?



Current study



Hypotheses

- AA attendance patterns of inpatient, outpatient, and detox clients will differ
- Distance from home to treatment will matter most among inpatient clients
- Travelling more than 10 miles to treatment will yield higher alcohol consumption post treatment among inpatient clients



Methods: Sample

- Recruited from 10 alcohol and drug treatment programs in Northern California
- N = 470 clients
- Inclusion criteria:
 - Current drinker
 - Lives within 100 miles of treatment
 - Residential street address



Methods: Measures

- Outcome measures:
 - Past 12 month **AA attendance**
 - Past 12 month **drink volume**
- Predictor variables:
 - Treatment type (Inpatient, Outpatient, Detox)
 - Distance to treatment (# of miles)



Control Variables

- Symptoms of problematic drinking
- Prior AA attendance
- Prior alcohol and drug treatment
- Neighborhood disadvantage
- Gender
- Age
- Total household income
- Education
- Employment status
- Marital status
- Ethnicity

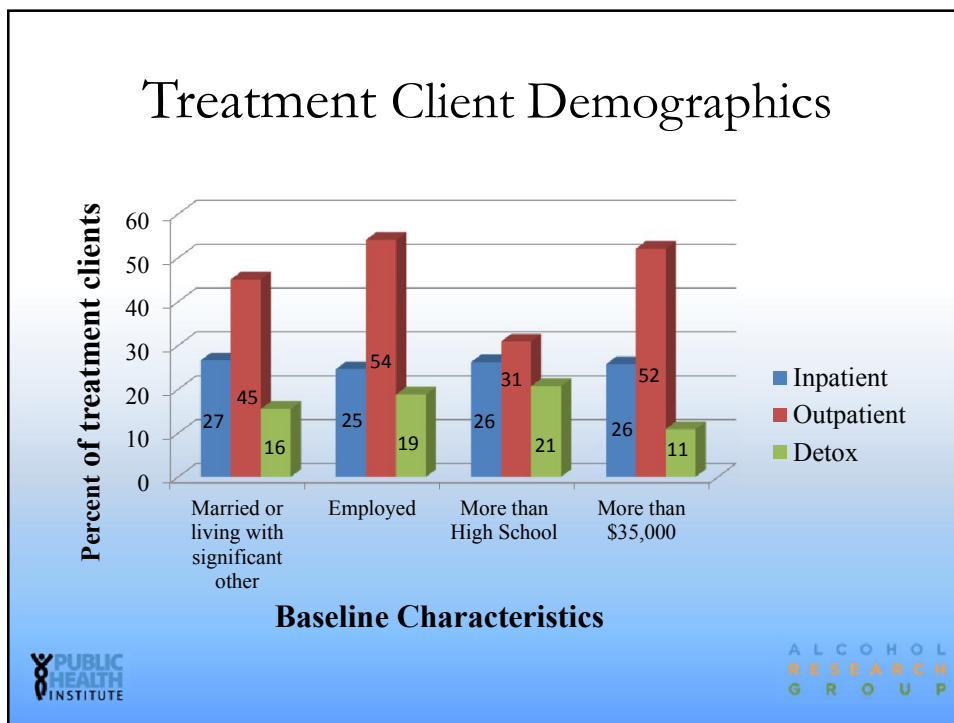
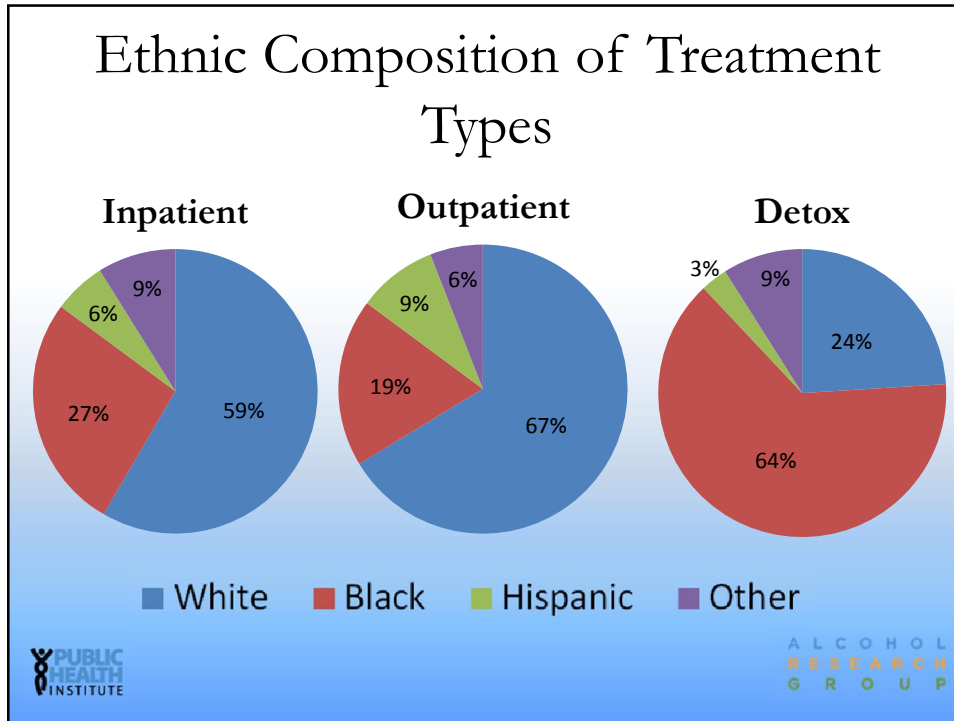


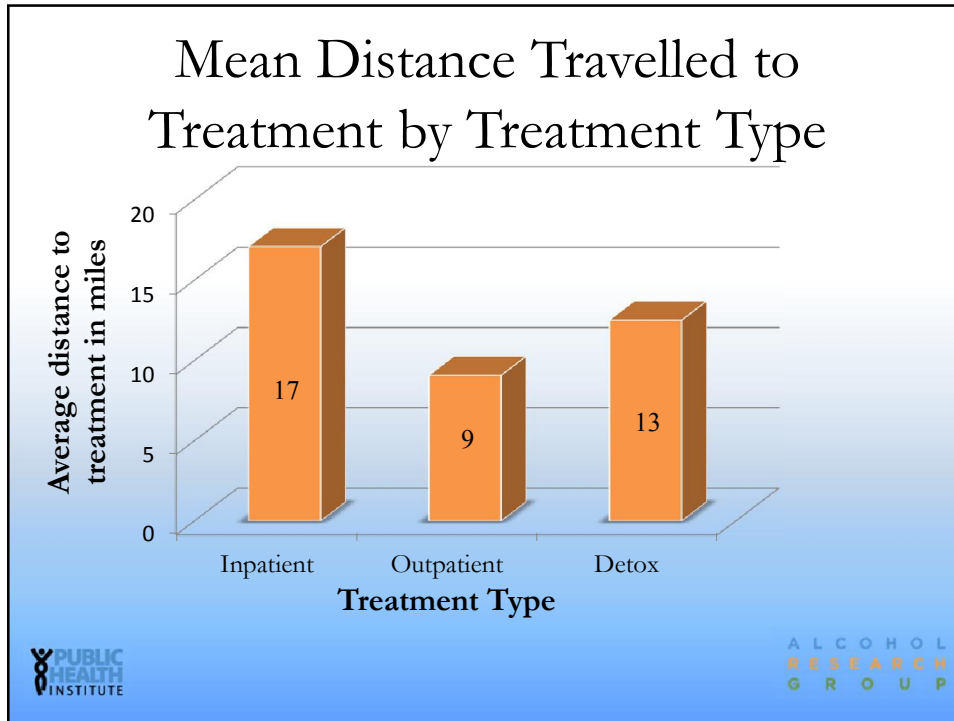
Analysis

- Multivariate linear regression models
 - Interaction terms
 - Stratified models
- Linear regression to test mediation

**utilized survey weighted data in all models*





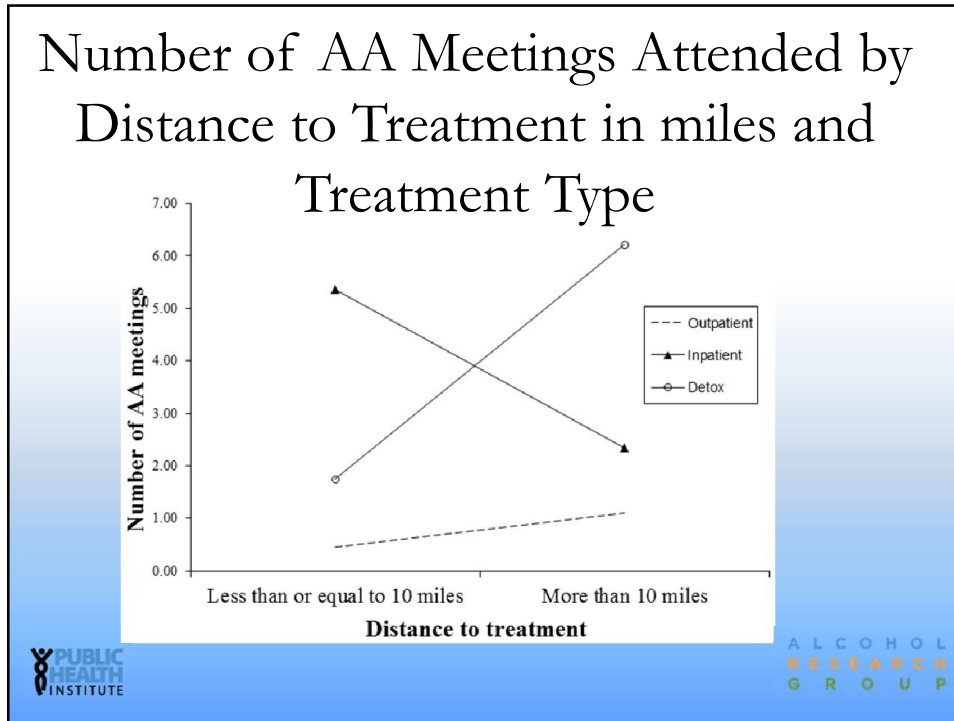


Results: Predictors of AA Attendance

Table 1

Baseline Predictors	Interaction Model	
	β	CI
Distance to treatment ^a	-0.14	(-0.93, 0.06)
Inpatient ^b	-1.44	(-2.5, -0.43)**
Detox ^b	-0.10	(-1.26, 1.07)
Inpatient*Distance	1.53	(0.14, 2.93)*
Detox*Distance	0.27	(-1.44, 1.99)

Notes: ^aLess than or equal to 10mi. ^bOutpatient. ⁺ $p < 0.10$. ^{*} $p < 0.05$. ^{**} $p < 0.01$.



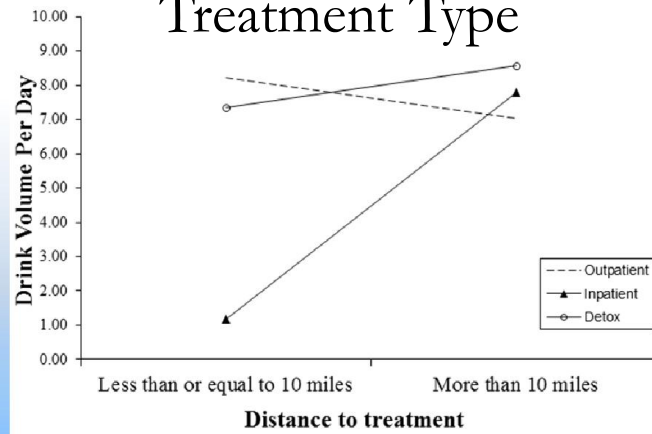
Results: Predictors of AA Drink Volume

Table 2

Baseline Predictors	Interaction Model	
	β	CI
Distance to treatment^a	0.37	(-0.13, 0.87)
Inpatient^b	1.47	(0.89, 2.06)**
Detox^b	0.63	(-0.15, 1.41)
Inpatient*Distance	-1.01	(-1.84, -0.18)*
Detox*Distance	0.60	(-0.39, 1.58)

Notes: ^aLess than or equal to 10mi. ^bOutpatient. ⁺ $p < 0.10$. ^{*} $p < 0.05$. ^{**} $p < 0.01$.

Number of Drinks in the Past 12 Months by Distance to Treatment and Treatment Type



Mediation Analyses

- Product of coefficients method of mediation
- Sobel test
 - Identified significant mediating effect of **AA attendance** between **inpatient** and **detox treatment type** and **drink volume** post treatment

Mediation Analyses

- Almost half (44%) of the total effect of inpatient treatment on alcohol consumption post treatment was due to AA attendance rates
- 82% of the total effect of detox treatment on alcohol consumption post treatment was due to AA attendance rates

Implications

- Inform residential treatment programs of the disparities in after-care utilization
 - Encourage customized post-treatment 12-step/AA integration plan
 - Establish appropriate resources by clients' homes

Implications

- Inform physicians or social workers delivering referrals to substance abuse treatment centers
 - Treatment location is an important consideration among users who may benefit most from intensive residential treatment



Strengths & Limitations

- Strengths
 - Explored ecological rather than individual barriers
 - Information on many baseline characteristics
 - Analysis of drinking outcome vs. abstinence



Strengths & Limitations

- Limitations
 - Possible sampling error
 - Treatment type categorization
 - Violations of normal distributions
 - Validity of self-report measures



Questions?

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