

Treatment Completion for Substance Use Disorders Among Older Adults: Differences by Race/Ethnicity and Gender

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Research Objectives

- To examine whether disparities in substance use disorder treatment completion exist by race/ethnicity within gender
- To explore whether racial/ethnic disparities in treatment completion vary because of the effects of predictor variables

Methods

Data Source:

- 2014-2017 Treatment Episode Datasets on Discharges

Analytic Sample:

- "Older adults" = 55 or older
- Treatment service evaluated = ambulatory non-intensive outpatient treatment
- 49,064 clients (44% NH White Males, 20% NH White Females, 18% NH Black Males, 5% NH Black Females, 9% Hispanic Males, 2% Hispanic Females, 1% NH American Indian/Alaskan Native Males, >1% NH American Indian/Alaskan Native Females).

Variables

- **Outcome Variables**
 - > Treatment Completion
- **Predictor Variables**
 - > Demographic (education, employment status, homelessness, marriage, referral source)
 - > Substance Use Variables (primary substance use, age at first use of primary substance)

Analyses:

- Descriptive Statistics (**Table 1**)
- Chi squares to evaluate differences by race/ethnicity and gender groups
- Correlation of independent variables to check for collinearity
- Logistic regression models separately by race/ethnicity

Table 1. Selected Client Characteristics at Treatment Admission by Race/Ethnicity and Gender(%)

	NH White Male (N=20,202)	NH White Female (N=8,951)	NH Black Male (N=8,264)	NH Black Female (N=2,318)	NH Am-Ind/ AI-Nat Male (N=465)	NH Am-Ind/ AI-Nat Female (N=218)	Hispanic Male (N=4,209)	Hispanic Female (N=958)
Education								
< 12 years	16.4%	12.8%	31.9%	30.3%	26.8%	30.8%	46.5%	38.7%
12 years	45.1%	39.2%	44.4%	40.9%	49.9%	39.6%	35.5%	32.9%
> 12 years	38.5%	48.0%	23.7%	28.8%	23.7%	29.6%	18.0%	28.4%
Homeless	5.8%	4.1%	9.8%	6.9%	7.8%	9.6%	8.4%	7.3%
Criminal J. Referral	46.9%	30.0%	41.1%	22.1%	51.3%	35.2%	48.3%	23.6%
Primary Substance Use								
Alcohol	69.7%	62.8%	45.0%	39.7%	72.6%	59.6%	59.5%	48.4%
Cocaine/Crack	2.9%	2.7%	18.3%	20.1%	3.9%	5.6%	5.9%	5.7%
Marijuana/Hashish	7.3%	6.3%	9.6%	9.0%	7.0%	8.7%	5.5%	6.7%
Heroin	5.9%	5.5%	22.8%	25.2%	6.6%	6.6%	19.7%	18.3%
Opiates	5.7%	10.3%	2.0%	4.2%	2.9%	2.9%	2.2%	8.2%
Other Opiates	8.5%	12.4%	2.3%	1.8%	7.0%	7.0%	7.3%	12.7%

Figure 1: Treatment Completion Rates by Race/Ethnicity and Gender

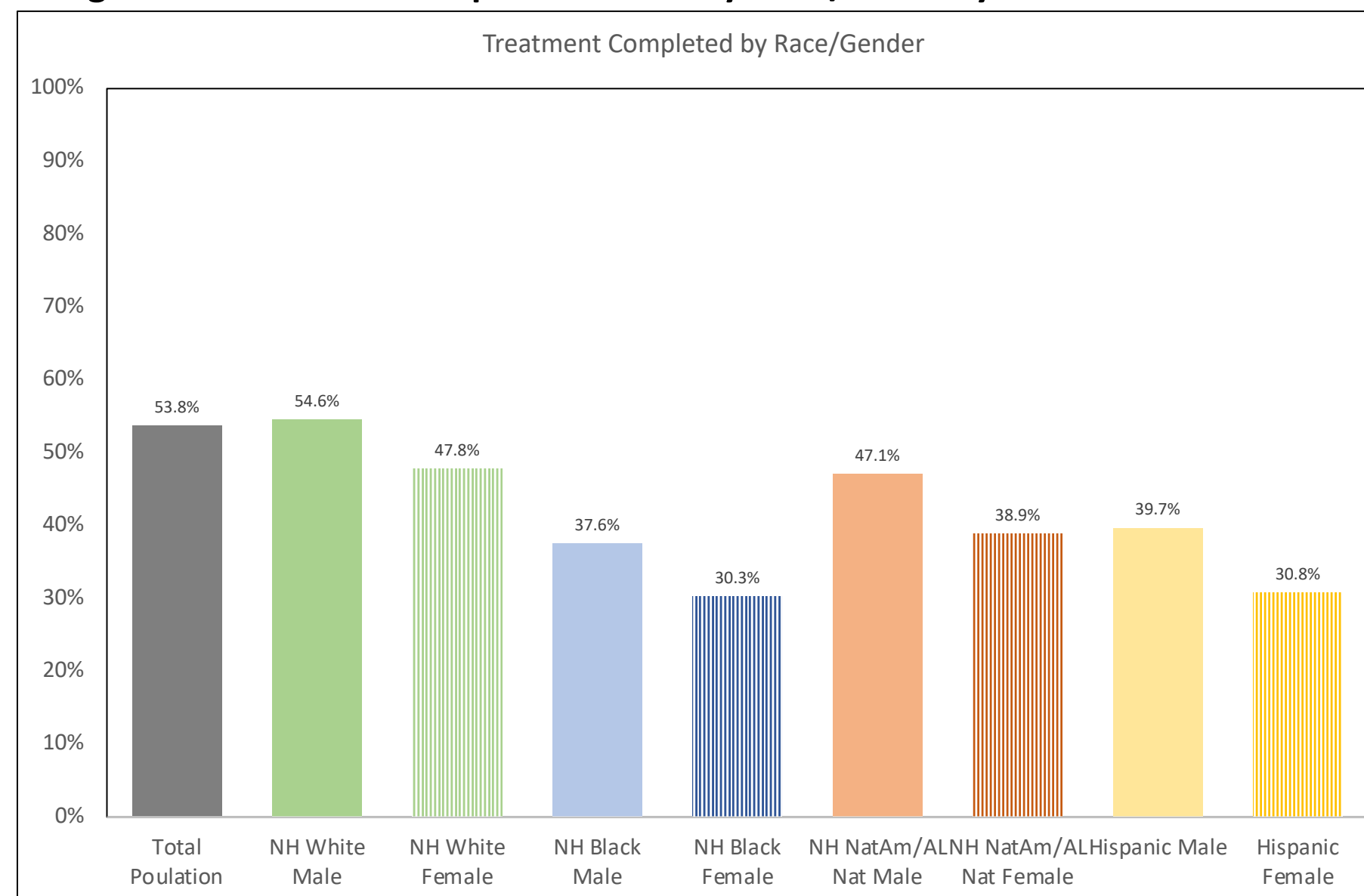


Table 2. Logistic Regression Models Predicting Treatment Completion

	NH White Males (OR; 95% CI)	NH White Females (OR; 95% CI)	NH Black Males (OR; 95% CI)	NH Black Females (OR; 95% CI)	NH Am-Ind/ AI-Nat Males (OR; 95% CI)	NH Am-Ind/ AI-Nat Females (OR; 95% CI)	Hispanic Males (OR; 95% CI)	Hispanic Females (OR; 95% CI)
Employment (REF: employed)								
Not Employed	0.72 (0.67, 0.78)	0.75 (0.67, 0.84)	0.63 (0.55, 0.71)	0.58 (0.44, 0.76)	0.59 (0.34, 1.00)	0.61 (0.27, 1.36)	0.65 (0.59, 0.73)	0.50 (0.34, 0.73)
Retired/disabled	0.79 (0.73, 0.85)	0.96 (0.85, 1.07)	0.67 (0.58, 0.77)	0.69 (0.52, 0.92)	0.57 (0.31, 1.06)	1.05 (0.39, 2.84)	0.65 (0.57, 0.73)	0.63 (0.30, 0.99)
Criminal Justice Referral	3.69 (3.47, 3.94)	4.45 (4.02, 4.95)	3.28 (2.97, 3.61)	4.30 (3.45, 5.37)	3.52 (2.28, 5.43)	6.22 (3.07, 12.6)	3.31 (3.03, 3.63)	3.93 (2.76, 5.59)
Arrested in the 30 days prior to admission	0.96 (0.85, 1.09)	1.42 (1.15, 1.74)	0.93 (0.75, 1.16)	1.50 (0.86, 2.59)	.89 (0.43, 1.86)	0.47 (0.15, 1.44)	0.79 (0.67, 0.94)	.86 (0.45, 1.63)
Homeless	0.70 (0.62, 0.79)	0.80 (0.63, 1.00)	0.71 (0.60, 0.83)	0.79 (0.55, 1.13)	0.61 (0.28, 1.33)	0.97 (0.32, 2.99)	0.63 (0.55, 0.73)	0.91 (0.53, 1.57)

* Figures in bold are significant; Also, other variables like substance use were assessed in the logistic regression model but are not displayed here.

Principal Findings

- Overall, as shown in **Figure 1** men have higher rates of treatment completion than women
- > This remains true across all race/ethnicity groups
- For both genders, NH White Individuals have higher treatment completion than other racial/ethnic groups
- As **Table 2** shows, when evaluating the effect of predictor variables on treatment completion, there are many similarities, but also some differences across racial/ethnic and gender groups.
- > For example, within most racial/ethnic gender groups, not being employed was associated with a lower likelihood of completing treatment compared to being employed.
- > The arrested variable showed mixed results for groups, NH White females who were arrested had higher odds of completing treatment than NH White females who weren't (OR = 1.42; CI: 1.15, 1.74), whereas Hispanic males who were arrested showed lower likelihood of completing treatment compared to Hispanic males who weren't (OR= 0.79; CI: 0.67, 0.94). Other groups showed insignificant results.

Limitations

- Not able to use Asian or Pacific Islander clients because of small sample sizes
- No information on treatment facilities
- Not examining how differences in state policies or funding affect treatment outcomes

Implications

- Given the low treatment outcome shown, state and national policy should increase funding for treatment programs
- Community-level interventions and programs should work closely to better understand and accommodate for the needs of older age groups
- Completion rates are low among older adults, more work needs to be done to address the gaps in research

Acknowledgements

Research reported in this poster was supported by the Tufts Summer Scholars Program as well as the T-Tripods Institute (NSF HDR grant 1934553) for partial funding.