

# Impact of a group-centered, physical activity-focused tobacco cessation program on smoking outcomes for women in residential treatment for substance use disorder

## BACKGROUND

- Smoking prevalence among women in substance use disorder (SUD) treatment is high, yet less than half of SUD treatment facilities offer tobacco cessation services.
- Tobacco cessation is associated with an increased likelihood of maintaining long-term sobriety.
- Physical activity has potential as a smoking cessation strategy due to its association with increasing quit attempts, improving smoking abstinence, and moderating cravings.

## PURPOSE

The purpose of this study was to examine the impact of a group-centered, physical activity-focused tobacco cessation program on smoking outcomes for women in residential treatment for SUD.

## METHODS

- Preliminary analysis was conducted on a prospective, longitudinal study of Get Fit and Quit (GFAQ), an 8-week smoking cessation program that integrates tobacco cessation education, physical activity, and group support to assist women with SUD to quit smoking.
- Data was collected at baseline, Week 4, and Week 8:
  - Participant surveys
    - ✓ Demographics
    - ✓ Cigarettes per day (CPD)
    - ✓ Nicotine dependence score (Fagerstrom Test for Nicotine Dependence)
    - ✓ Confidence and importance ratings for quitting (0-10)
  - Expired Air Carbon Monoxide (EACO, Bedfont® Micro+™ Smokerlyzer®)

## RESULTS

- Forty-two women (4 cohorts) completed the program (Table 1).
- Significant differences were observed from enrollment to week 4 and from enrollment to week 8 (Table 2):
  - Average CPD
  - EACO levels
  - Mean nicotine dependence scores
  - Confidence in quitting
  - Importance in quitting (enrollment to week 4 only)



**A group-centered tobacco cessation program incorporating physical activity moves women towards tobacco cessation while in recovery for substance abuse.**

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Table 1. Demographic Characteristics

N = 42	
Demographic Characteristic	n (%)
<b>Age (mean)</b>	33 years
<b>Race</b>	
White	35 (83)
African American	4 (10)
Other	3 (7)
<b>Partner Status</b>	
Single	28 (67)
Divorced/separated	8 (19)
Married/living with partner	6 (14)
<b>Highest education</b>	
<HS	13 (31)
HS graduate	10 (24)
Some college	16 (38)
≥College grad	3 (7)
<b>Employment</b>	
Unemployed	40 (95)

Table 2. Smoking Outcomes

	Baseline Mean (SD)	Week 4 Mean (SD)	Week 8 Mean (SD)	Baseline-Week 4 Baseline-Week 8 (p)
Average CPD	13.5 (4.9)	9.4 (5.4)	6.8 (5.0)	p<0.01 p<0.01
EACO (ppm)	19.9 (10.0)	16.0 (9.8)	16.2 (9.6)	p<0.01 p=0.02
Nicotine Dependence Score	5.3 (1.9)	4.0 (2.0)	3.4 (2.0)	p<0.01 p<0.01
Confidence in Quitting	4.4 (2.6)	5.6 (3.0)	6.5 (3.0)	p=0.01 p<0.01
Importance in Quitting	6.7 (2.4)	7.4 (2.3)	7.4 (2.3)	p<0.01 p=0.06

\*Paired sample t-tests were used with SAS version 9.4, p = 0.05.

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