

# Gender and Smoking Cessation Treatment for Hospitalized Smokers

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# Significance and Background

- Tobacco use is a substantial cause of death and morbidity
- Heavy smokers are:
  - Twice as likely to die post-operatively
  - Four times more likely to have pulmonary complications in the ICU
- Hospitalization can impose nicotine abstinence and development of nicotine withdrawal symptoms

# Parent Study – Smoking Cessation RCT

- Framework: Self-efficacy Theory
- Enrolled hospitalized smokers:  $n = 80$
- Enhanced Usual Care (EUC) Treatment prior to discharge for all participants
- Randomized 2 group design
  - EUC only or
  - EUC + Post-discharge phone intervention (8 calls)
- 3 & 6 month follow-up after discharge
- Outcome: 7-day smoking status point prevalence validated by exhaled CO

# Specific Aims

- Aim 1: Explore gender related differences of baseline characteristics.
- Aim 2: Explore the influence of gender differences on smoking behavior.

# Design

- Design: Theory driven secondary analysis
- Planned Statistical Methods
  - Measures of Central Tendency & Chi-Square
  - General Linear Models
  - Logistic (Binary) Regression

# Methods

## Variables

- Smoking behavior
- Tobacco Abstinence Self-efficacy
- Mood
- Outcome Expectancy
- Tobacco Use Characteristics
- Socio-demographics

## Measures

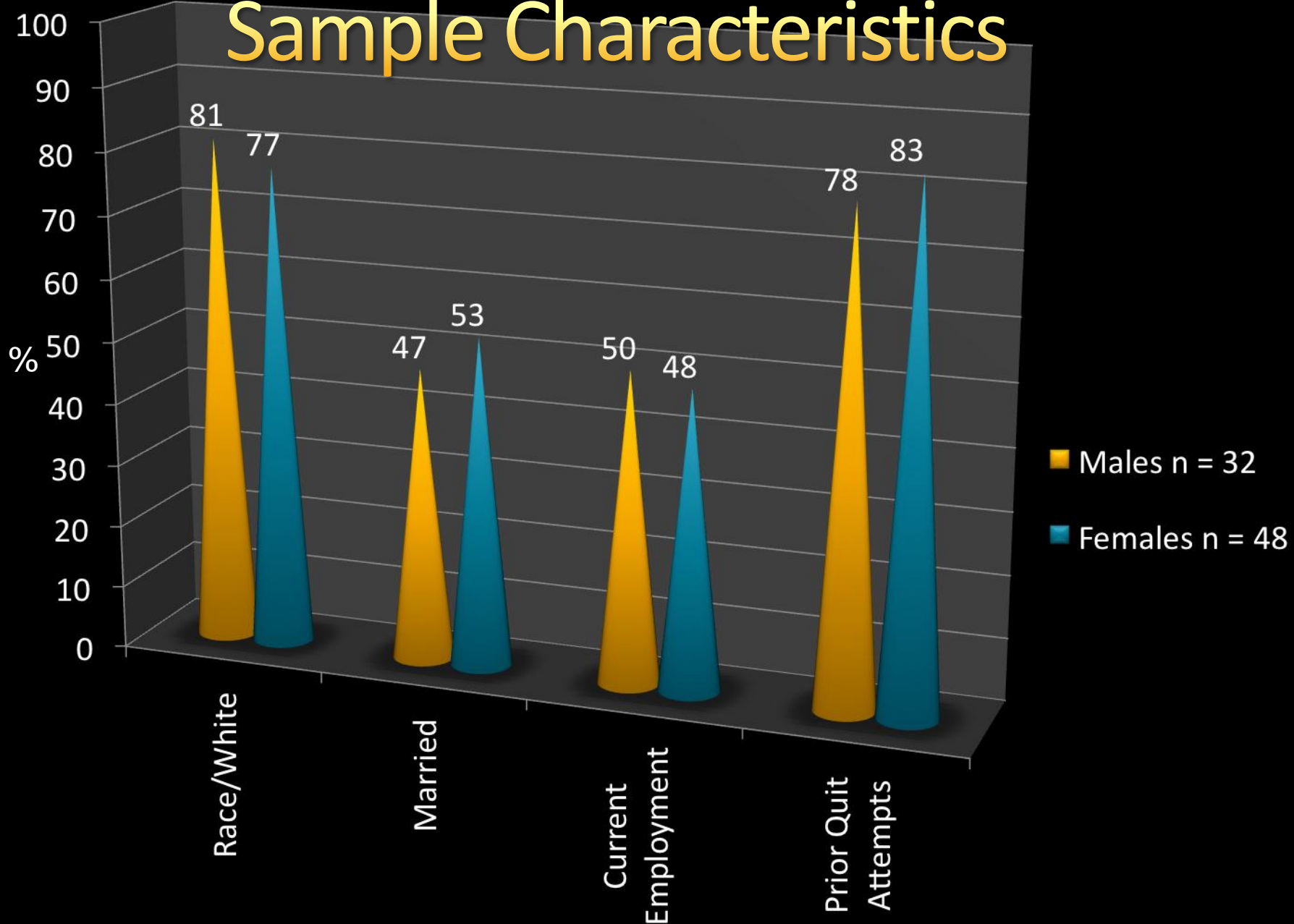
- 7-day Point Prevalence validated by exhaled CO
- Tobacco Abstinence Self-efficacy Questionnaire (Quest.)
- Profile of Mood States (POMS)
- Perceived Therapeutic Efficacy Scale
- Tobacco Characteristics Quest.
- CRCDD – Socio-demographic Quest.

# Sample Characteristics

Baseline Characteristics	Males (n = 32) Mean (SD)	Females (n = 48) Mean (SD)	Sig.
Age (yrs.)	50.8 (9.9)	50.9 (12.0)	ns
Cigarettes/Day	21.7 (17.0)	17.4 (9.3)	ns
Base Exhaled CO	7.2 (5.7)	6.6 (8.0)	ns
No. Withdrawal Symptoms	5.6 (3.7)	7.3 (3.3)	.03
Length of Hospital Stay (LOS)	6.5 (5.5)	6.2 (5.4)	ns



# Sample Characteristics



# Univariate Gender Differences

Variable	Males M (SD)	Females M (SD)	F	df1	Sig.
Self-efficacy	64.9 (22.9)	58.8 (24.1)	1.26	1	ns
Outcome Expectancy	77.2 (25.7)	75.4 (25.2)	.10	1	ns
Tension/Anxiety	21.5 (7.0)	24.9 (6.6)	4.84	1	.03*
Depression/Dejection	25.2 (11.4)	30.8 (12.9)	4.04	1	.05*
Anger/Hostility	18.1 (5.6)	22.0 (9.8)	4.26	1	.04*
Vigor/Activity	19.2 (7.5)	17.2 (6.9)	1.55	1	ns
Fatigue/Inertia	16.3 (6.4)	18.7 (6.9)	2.45	1	ns
Confusion/Bewilderment	15.6 (5.2)	16.4 (4.8)	.57	1	ns

\* Not significant with divided alpha

# Stepwise Logistic Regression

Final Step of Stepwise Logistic Regression Model for Males

Variable	<i>B</i> (SE)	Odds Ratio	Significance	Lower CI	Upper CI
LOS	.49 (.20)	1.68	.02	1.1	2.4

Final Step of Stepwise Logistic Regression Model for Females

Variable	<i>B</i> (SE)	Odds Ratio	Significance	Lower CI	Upper CI
RX GRP	2.4 (.93)	10.5	.006	2.0	56.0

# Conclusions

- Women experienced a higher number of nicotine withdrawal symptoms than men.
- Women had a trend for higher rates of tension/anxiety, depression/dejection, and anger/hostility.
- Women assigned to the parent study smoking cessation intervention were 10.5 times more likely to be tobacco abstinent 6 months following their hospital discharge.

# Considerations

- Limitation considerations for this study included:
  - Small sample size
  - Secondary analysis
  - Lack of qualitative interviews

# Future Nursing & Research Implications

- Exploring the role of adequate self-assessment by women of their nicotine withdrawal symptoms, related negative moods, and lack of confidence to quit smoking with:
  - Their motivation to quit smoking and maintain a change in behavior
  - Partner with a health professional for tx assistance.
- Exploring the effect of a lack of adequate self-assessment by men and or women of their withdrawal symptoms and effort to quit smoking?

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Questions and Discussion