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The Tobacco Dependence Clinic: Gender Issues and Possibilities in Cessation Treatment

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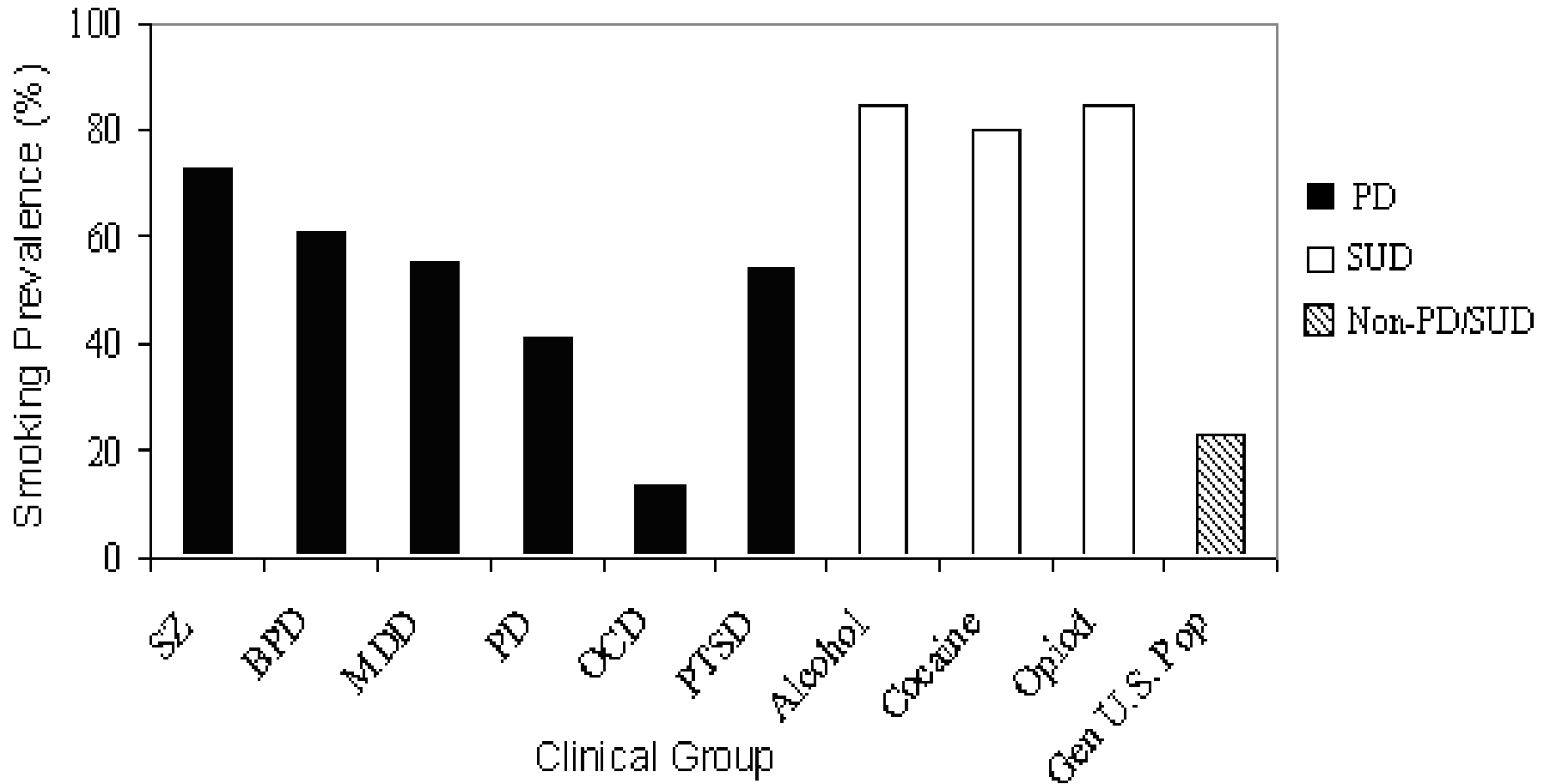
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iTAG 2012 Annual Spring Meeting

Background & Significance

From Kalman, Morissette and George (2005), Am. J. Addict., 14: 106-123

Program Description

- The Tobacco Dependence Clinic (TDC) is a program that provides **behavioural counselling** and up to **6-7months** of **no-cost pharmacotherapy** for clients through VCH Mental Health and Addiction Services

- Program is run with a team of nurses, counsellors, respiratory therapists, and a physician.

- Currently in 7 Addictions services located in community health centres in Vancouver.

Eligibility:
- 19 years or older
- Tobacco dependent
- Have a history of substance use disorder and/or mental illness
- Financially disadvantaged

Combination Pharmacotherapy

Nicotine Replacement Therapy

Patch

Gum

Lozenge

Inhaler

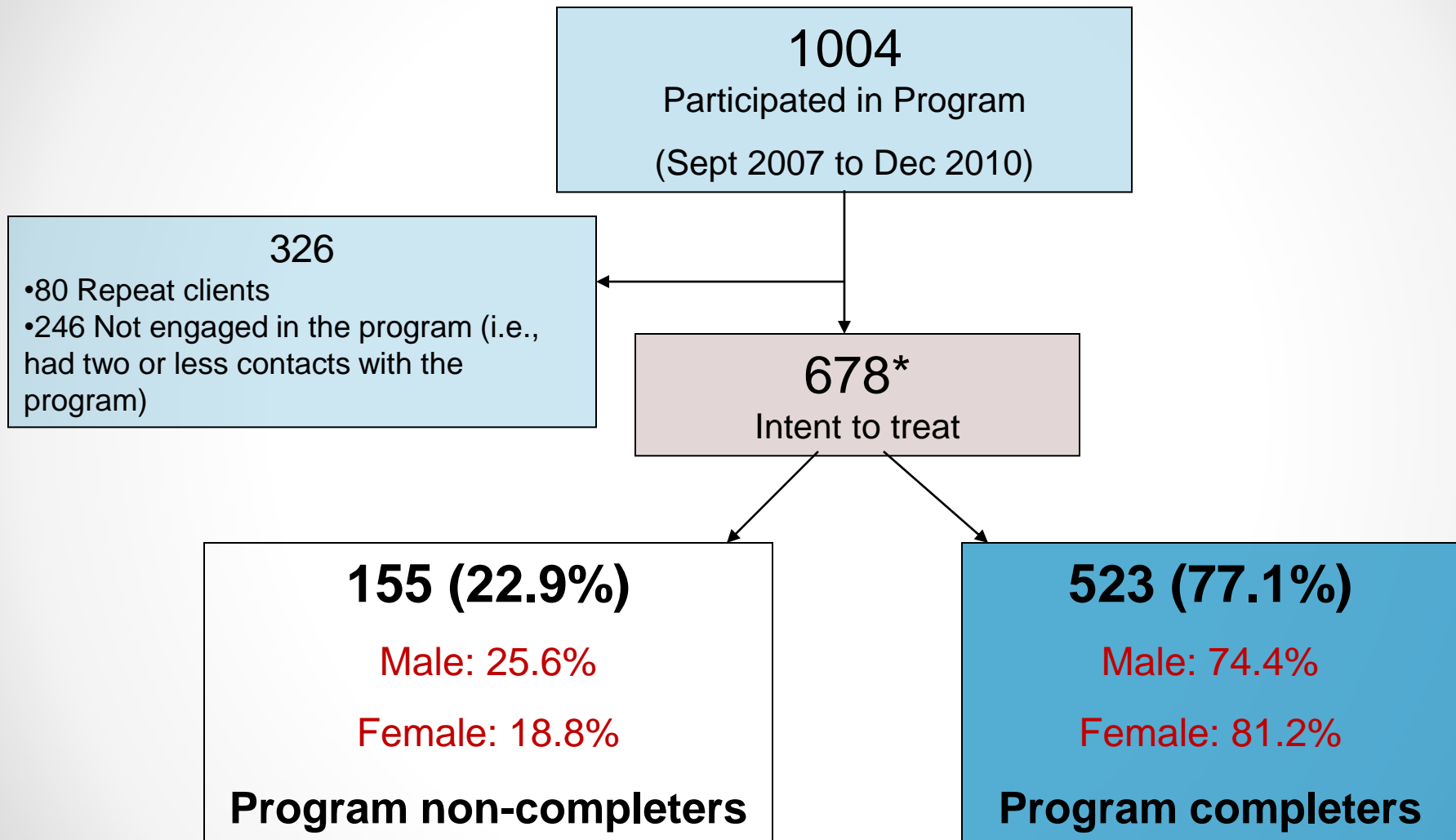## Oral Medications

Zyban

Champix

Program philosophy: Quitting smoking is a process and not an event

Aims

- To examine sex/gender differences in factors associated with substance use, psychiatric disorders, and smoking among participants of the TDC program

- To examine predictors of program completion and smoking cessation among participants of the TDC program

Sample

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                    ┌──────────────────────────┐
                    │          1004            │
                    │  Participated in Program  │
                    │                          │
                    │ (Sept 2007 to Dec 2010)  │
                    └──────────────────────────┘
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326
- 80 Repeat clients
- 246 Not engaged in the program (i.e., had two or less contacts with the program)

678*
Intent to treat

155 (22.9%)

Male: 25.6%

Female: 18.8%

Program non-completers

523 (77.1%)

Male: 74.4%

Female: 81.2%

Program completers

*Three individuals selected 'other' in response to gender and were not included in analyses

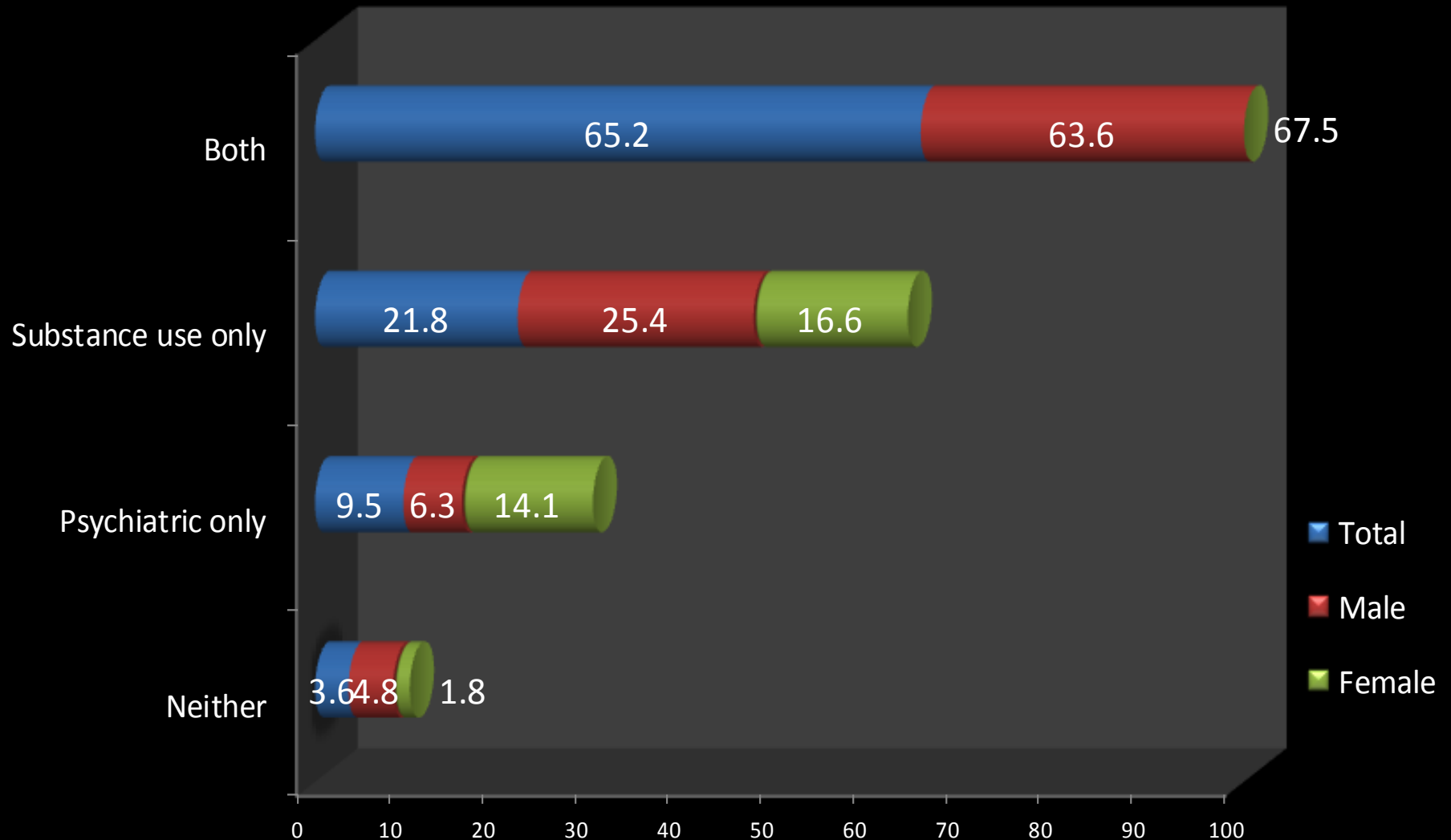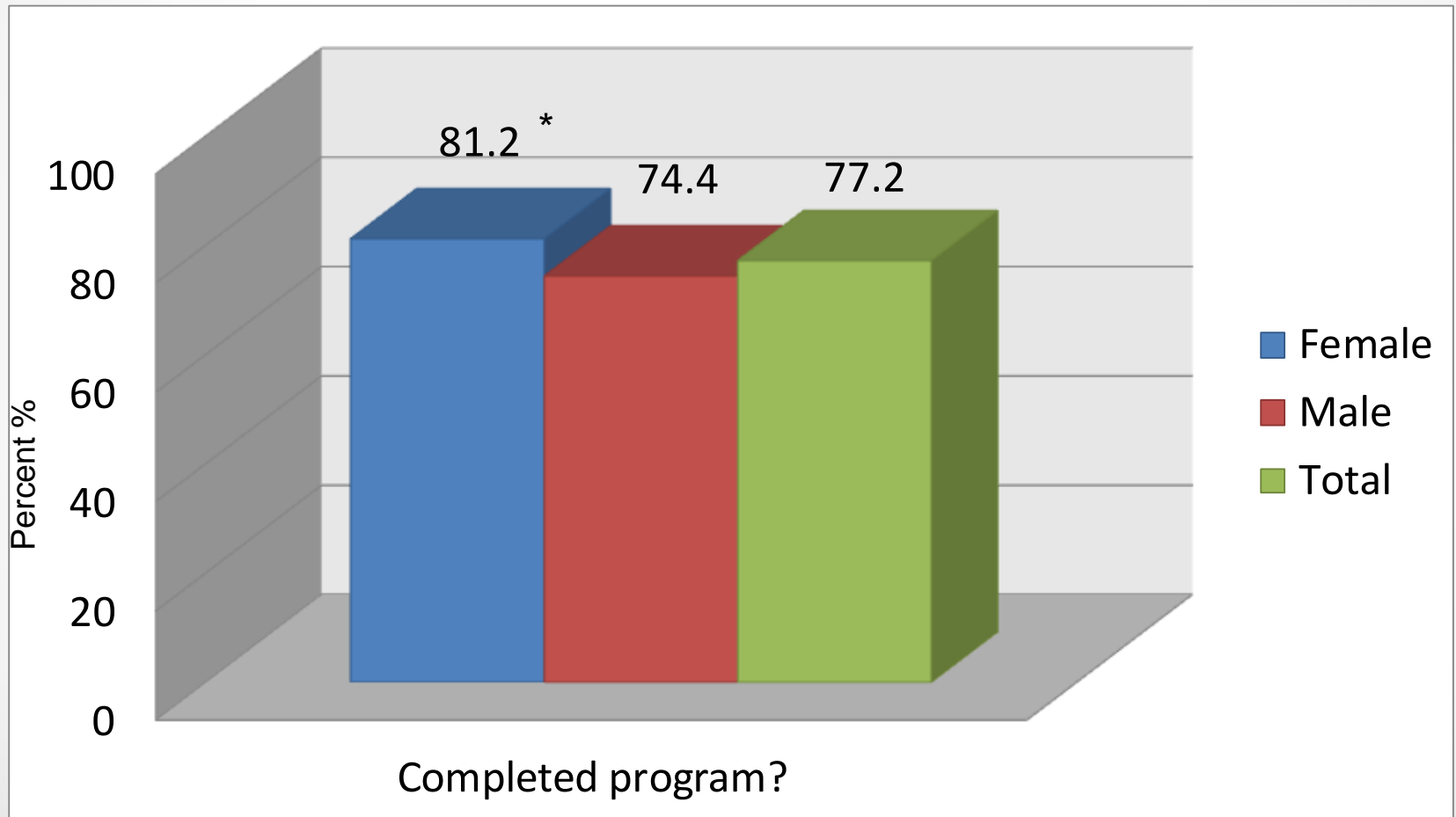# Substance Use Disorder & Psychiatric Disorder History (N = 675)

Table1. Baseline Characteristics (N = 678)

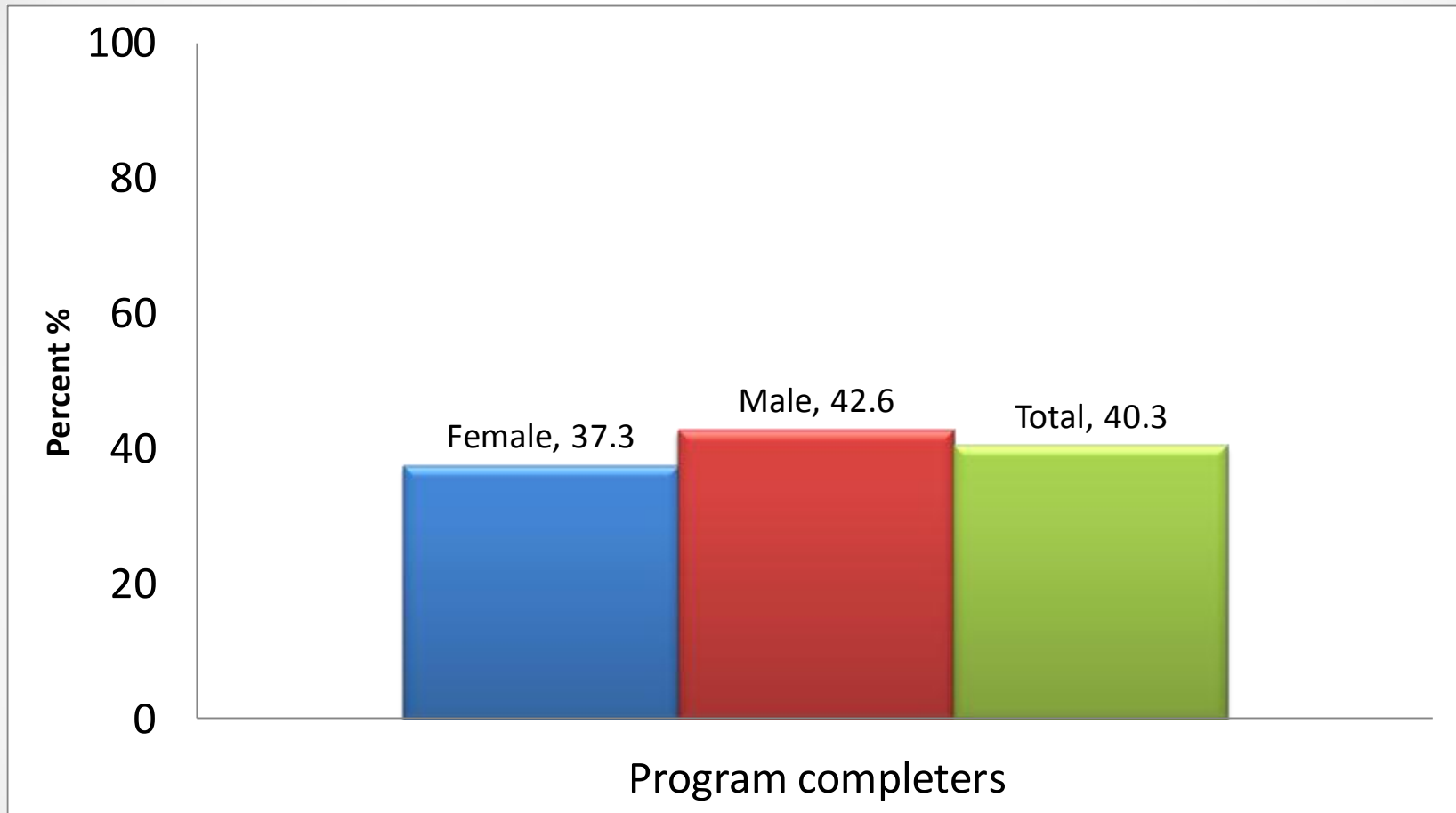|	Women		Men	
	Mean	SD	Mean	SD
Age of participant (years)**	44.3	11.1	50.7	10.1
Cigarettes smoked per day**	18.7	8.6	21.6	11.3
Age at smoking initiation**	14.4	4.8	15.6	6.4
Importance of quitting (scale of 0 'low' to 10 'high')	9.0	1.3	9.0	1.4
Confidence in quitting** (scale of 0 'low' to 10 'high')	7.0	2.4	7.4	2.4
FTND at Baseline	5.8	2.0	6.1	2.0
CO level**	19.5	12.4	21.8	15.1

Note. **indicates significant gender differences
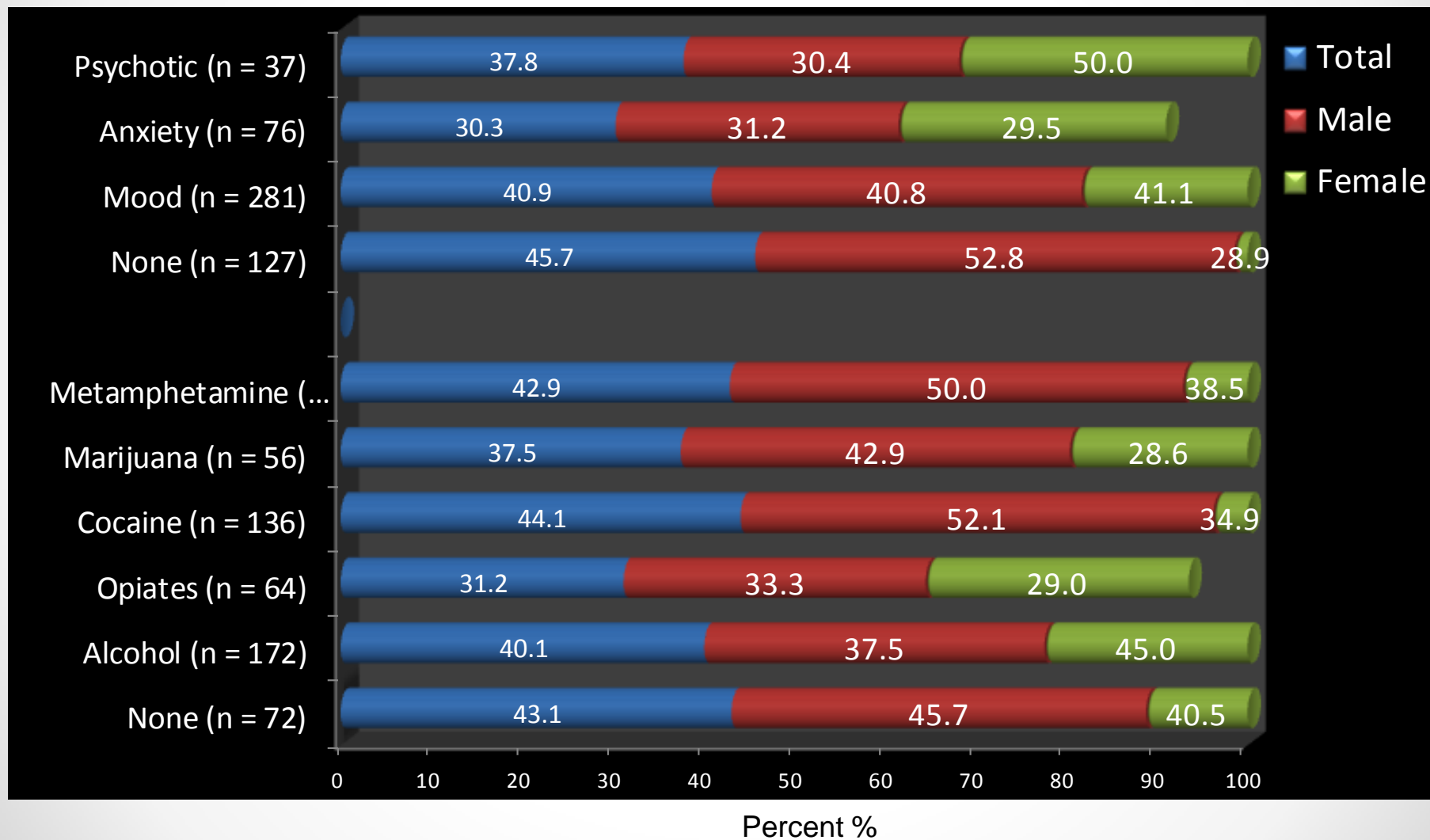
Program Completion (n = 675)

* Statistically significant differences by gender

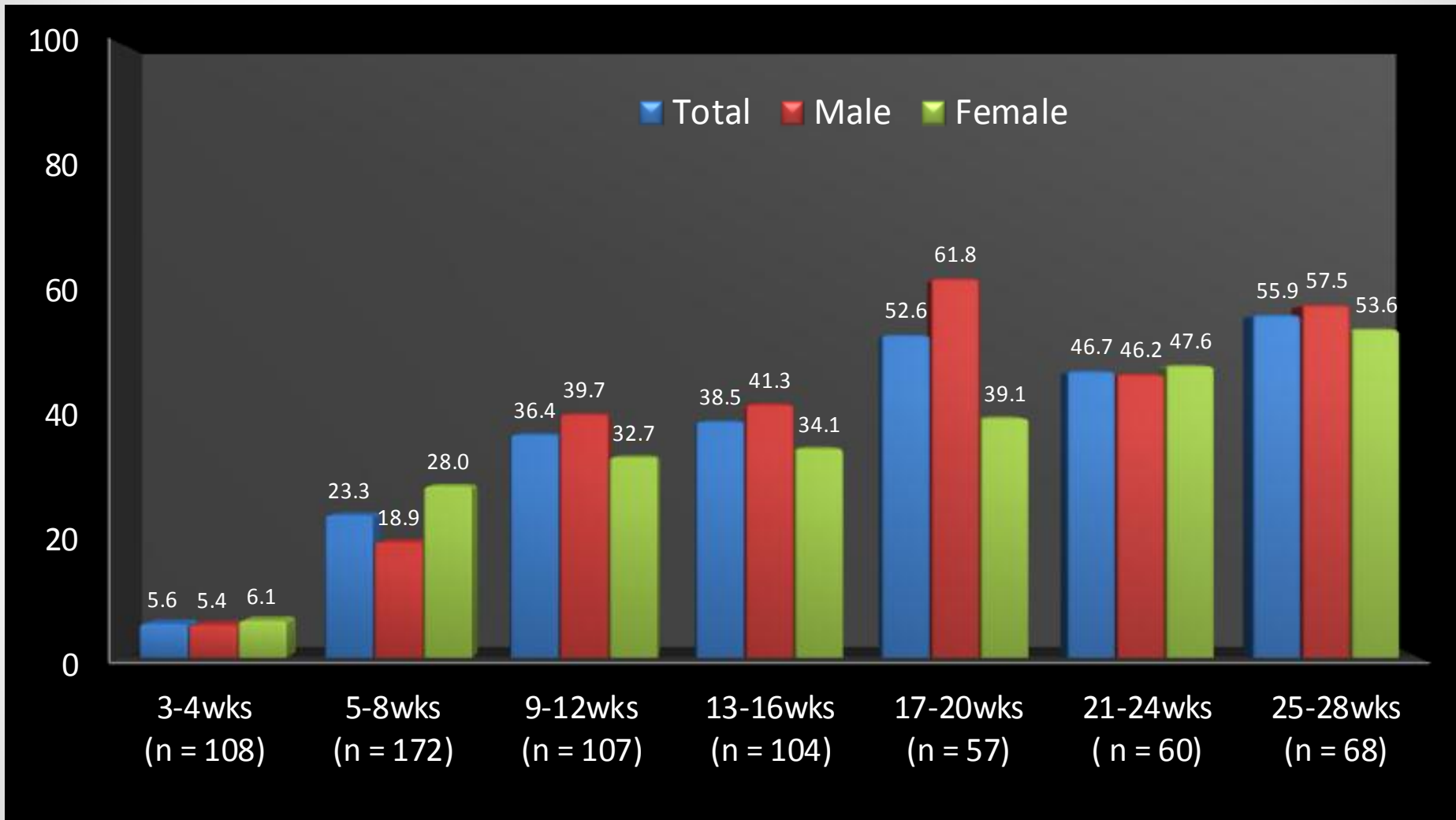# Smoking Cessation* Outcomes at end-of-treatment (n = 521)

*Smoking cessation at end-of-treatment (i.e., anytime between 8 weeks to 26 weeks) verified by expired CO levels

Smoking cessation by SUD and PD among program completers (n = 521)*
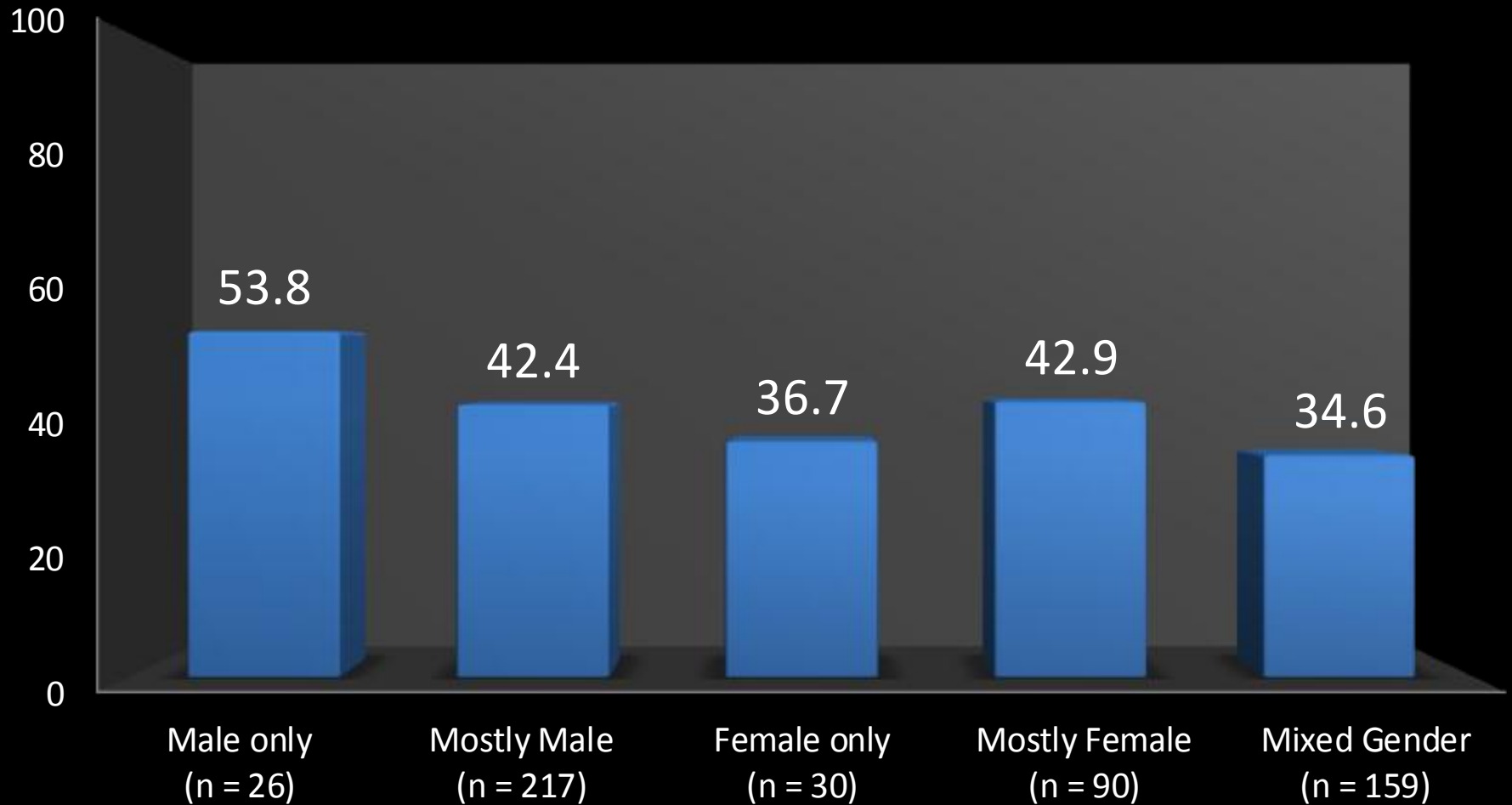

Percent %

* No statistically significant differences between groups

Smoking Cessation by length of stay in the program (n = 675)*

* **Statistically significant differences between week categories in total sample and by gender**

Smoking Cessation by type of group cohort (n = 523)*

* **No** Statistically significant differences between groups

Multivariate predictors[a] of program completion (n = 675[b])

Predictors	Total Sample		Males		Females	
	Odds Ratio	95% CI	Odds Ratio	95% CI	Odds Ratio	95% CI
Gender Male (referent) Female	 1.0 1.78**	 - 1.19-2.65	--	--	--	--
Age	1.03**	1.01-1.05	1.03**	1.01-1.06	--	--
Importance to quit	-	-	-	-	1.26*	1.01-1.56

a. Employing a two-step model building process in which variables associated with smoking cessation (at alpha < 1.0) in the unadjusted analyses are included in a second-step for adjusted analyses. Only variables which were significantly predictive of smoking cessation in the final adjusted multivariate model are shown.
b. Analysis includes repeat clients to the TDC
    * = p <.05, ** = p <.001, *** = p <.001

Multivariate predictors[a] of smoking cessation among program completers at end of treatment (n = 494)

Predictors	Total Sample		Males		Females	
	Odds Ratio	95% CI	Odds Ratio	95% CI	Odds Ratio	95% CI
History of PD					--	--
None (referent)	1.00	-	1.00	-		
Mood	.86	.55-1.36	.68	.39-1.19		
Anxiety	.53*	.28-1.00	.41*	.16-1.00		
Psychotic	.64	.28-1.45	.28*	.10-.80		
FTND	.89*	.80-.99	.88*	.78-.99	--	--
Total Visits	1.07***	1.03-1.10	1.08***	1.04-1.12	1.05*	1.01-1.09

a. Employing a two-step model building process in which variables associated with smoking cessation (at alpha < 1.0) in the unadjusted analyses are included in a second-step for adjusted analyses. Only variables which were significantly predictive of smoking cessation in the final adjusted multivariate model are shown.

* = p <.05, ** = p <.001, *** = p <.001

Summary of Key Findings

- Associations with gender:
  - Women were more likely to have a history of a mental illness and complete the program.
  - Men were more likely to have a substance use disorder, be older, smoke more cigarettes per day, and have greater confidence in their ability to quit

- Associations with smoking cessation in stratified analysis:
  - Among men, poor smoking cessation was associated with having an anxiety or psychotic disorder (as compared to no psychiatric disorder), higher nicotine dependence at baseline, and less visits to the program.
  - Among women, poor smoking cessation was associated with less visits to the program.