

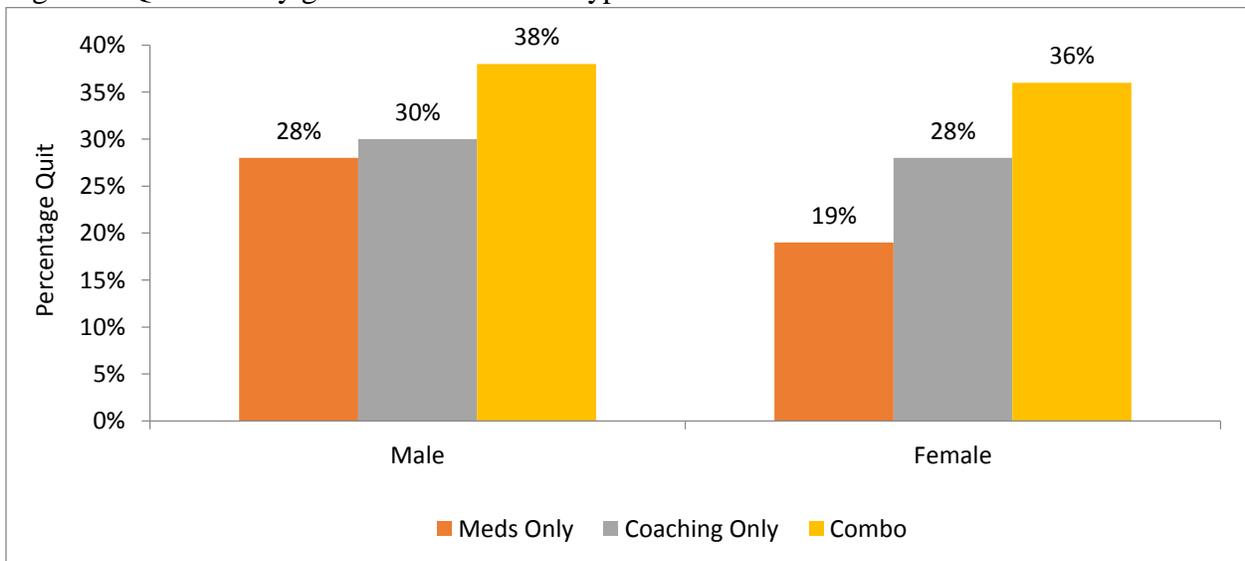
Existing research indicates that men and women are likely to smoke for different reasons and respond to smoking cessation treatments differently. In this data brief, we were interested in exploring gender differences among Arizona Smokers’ Helpline (ASHLine) clients in the type of treatment they received and if quit rates varied as a result of gender.

Methods. We examined enrollment and treatment outcomes for clients (N=12,856) who were reached for seven month follow up between January 2011 and January 2015. Based on clients’ preference at the time of enrollment, we categorized men and women into one of three treatment groups (medication only, coaching only, combination of medication and coaching). Quit rates were calculated using 30-day abstinence at 7-months follow-up. We conducted a logistic regression to examine the odds of quitting for men and women across the three treatment groups.

Results. There was no difference between men and women in their selection of treatment. For example, 2% of men and 1% of women received medication only, 36% and 34% received coaching only, and 56% and 60% received combination treatment, respectively. The average number of counseling calls was the same for men (4.79 calls) and women (4.72 calls).

Quit rates. Overall, men had a significantly higher quit rate than women (35% vs. 31%, $p < .001$) at 7 month follow up. Figure 1 shows quit rates by treatment type.

Figure 1. Quit rates by gender and treatment type



We found, however, that the inclusion of coaching with medication (combined treatment) increased the odds of quitting more for women compared to men. Specifically, women who received combined treatment were 112% more likely to quit (as compared to 76% of men) (see Table 1).

Table 1. Odds of quitting for men and women by treatment group

	MEN	WOMEN
Treatment Groups	Percent increase in odds of quitting	
Enrolled, no further contact	<i>Reference group</i>	<i>Reference group</i>
Medication only	21%	1%
Coaching only	31%	53%*
Combination treatment	76%*	112%*

*Statistically significant ($P < .05$)

Main Points. There were no differences in treatment preferences between men and women. Overall, men were more likely to report being quit at 7 month follow up compared to women. Coaching improves the effectiveness of cessation treatment for both men and women, however the effect is larger for women.

Summary. These findings are consistent with the literature that shows that men more commonly smoke to manage the pharmacological effects of nicotine (e.g., nicotine withdrawal) while women are more likely to smoke to manage mood and anxiety-related factors (e.g., negative affect, weight concerns).¹⁻³ Combination treatment, which is most recommended for optimal quit rates, enhances quit rates for men and women. Women, however, may benefit more from tobacco cessation interventions that utilize evidence-based tailored strategies to manage psychological factors (e.g., mood, weight concerns, stress) that may be barriers for quitting and promoting smoking behavior change.

References

1. Leventhal AM, Waters AJ, Boyd S, Moolchan ET, Lerman C, Pickworth WB. Gender differences in acute tobacco withdrawal: Effects on subjective, cognitive, and physiological measures. *Exp Clin Psychopharmacol.* 2007;15(1):21-36. doi:10.1037/1064-1297.15.1.21.
2. Pang RD, Zvolensky MJ, Schmidt NB, Leventhal AM. Gender differences in negative reinforcement smoking expectancies. *Nicotine Tob Res.* October 2014:ntu226. doi:10.1093/ntr/ntu226.
3. Collins BN, Nair US, Komaroff E. Smoking cue reactivity across massed extinction trials: Negative affect and gender effects. *Addict Behav.* 2011;36(4):308-314. doi:10.1016/j.addbeh.2010.11.015.