

Long-Term **Smoking Cessation B-ces** Outcomes for **Sexual Minority D-sxo** Versus Nonminority Smokers in a Large **Randomized Controlled Trial M-mth** of Two Web-Based Interventions **P-trt**. Introduction Despite greater **smoking prevalence B-prv** among **sexual minority D-sxo** (SM) individuals **relative to R-rel** non-SM individuals, minimal research has examined whether SM smokers have differential success at **quitting B-ces**, and no prior treatment studies have examined differences within SM subgroups. There is also limited knowledge of the psychosocial characteristics of treatment-seeking SM smokers, which could inform targeted treatments. To address these gaps, we compared treatment outcomes and **baseline M-mth** characteristics for SM and non-SM smokers and for **bisexual D-sxo** versus **lesbian D-sxo** or **gay D-sxo** smokers in a large **randomized controlled trial M-mth** of two web-based **cessation B-ces** treatments. Methods Trial participants completed a **survey M-mth** to assess **baseline M-mth** characteristics, including self-identification as either SM (n = 253; **lesbian D-sxo** or **gay D-sxo**, n = 122; **bisexual D-sxo**, n = 131) or non-SM (n = 2384 **B-tme**). The primary **cessation B-ces** outcome was complete-case, **self-reported M-mth** **30-day B-tme** **abstinence B-ces** at **12 months B-tme** after randomization. Results **Cessation B-ces** outcomes did not differ significantly for SM versus non-SM smokers (24% vs. 25%, adjusted OR = 0.91, **95% CI M-sts** = 0.65 to 1.28) or across SM subgroups (24% for **bisexual D-sxo** vs. 23% for **lesbian D-sxo** or **gay D-sxo**, adjusted OR = 1.01, **95% CI M-sts** = 0.51 to 2.00), and there were no interactions with **treatment group M-mth** assignment. **At baseline M-mth**, SM smokers differed from non-SM smokers on most **demographics D-soc**, were **more likely to R-rel** screen positive for all mental health conditions assessed, and had greater **exposure B-exp** to other smokers in the home. Conclusions Substantial differences in **baseline M-mth** characteristics of SM versus non-SM smokers and **bisexual D-sxo** versus **lesbian D-sxo** or **gay D-sxo** smokers did not translate into differential treatment outcomes. Nonetheless, SM smokers' willingness or ability to quit smoking could be enhanced by taking their unique psychosocial profile into account when designing targeted interventions **P-trt**. Implications The findings of this study, which included the largest **sample M-mth** of SM smokers in a prospective **intervention P-trt** trial to date, support those of a small extant body of literature showing **no differences R-rel** in treatment-assisted **cessation B-ces** outcomes between SM and non-SM smokers. Regardless of their **quit rates B-ces** **relative to R-rel** non-SM smokers, SM smokers' willingness or ability to quit smoking could potentially be enhanced by taking their unique psychosocial profile into account in **intervention P-trt** design, including their younger **age D-age**, lower **socioeconomic status D-soc**, greater likelihood of being racial or **ethnic D-rac** **minorities D-rac**, and greater **prevalence B-prv** of mental health symptoms.