

Put It Out Project (POP) Facebook Intervention **P-trt** for Young Sexual and Gender Minority **D-gen** Smokers: Outcomes of a Pilot, **Randomized M-mth**, Controlled Trial. Introduction This trial investigated whether a Facebook smoking cessation **B-ces** intervention **P-trt** culturally tailored to young sexual and gender minority **D-gen** (SGM) smokers (versus non-tailored) would increase smoking abstinence **B-ces**. Methods Participants were 165 SGM young adult **D-age** US smokers (age **D-age** 18–25 **D-age**) recruited from Facebook in April 2018 **B-tme** and **randomized M-mth** to an SGM-tailored (POP; N = 84) or non-tailored (TSP-SGM; N = 81) intervention **P-trt**. Interventions **P-trt** delivered weekly live counseling **P-trt** sessions and 90 daily Facebook posts to participants in Facebook groups. Primary analyses compared POP and TSP-SGM on biochemically verified smoking abstinence **B-ces** (yes/no; primary outcome), self-reported **M-mth** 7-day **B-tme** point prevalence **B-prv** abstinence **B-ces** (yes/no), reduction in cigarettes **T-com** per week by 50 % from baseline **M-mth** (yes/no), making a quit attempt **B-ces** during treatment (yes/no), and stage of change (precontemplation/contemplation vs. preparation/action). Supplemental analyses compared POP to two historical control groups **M-mth**. Results POP participants were more **R-rel** likely than TSP-SGM participants to report smoking abstinence **B-ces** at 3 (23.8% vs. 12.3%; OR = 2.50; p = .03) and 6 months **B-tme** (34.5% vs. 12.3%; OR = 4.06; p < .001) and reduction in smoking at 3 months **B-tme** (52.4% vs. 39.5%; OR = 2.11; p = .03). Biochemically verified smoking abstinence **B-ces** did not significantly differ between POP and TSP-SGM at 3 (OR = 2.00; p = .33) or 6 months **B-tme** (OR = 3.12; p = .08), potentially due to challenges with remote biochemical verification. In supplemental analyses, POP participants were more likely to **R-rel** report abstinence **B-ces** at 3 (OR = 6.82, p = .01) and 6 (OR = 2.75, p = .03) months and reduced smoking at 3 months **B-tme** (OR = 2.72, p = .01) than participants who received a referral to Smokefree.gov. Conclusions This pilot study provides preliminary support for the effectiveness of a Facebook smoking cessation **B-ces** intervention **P-trt** tailored to SGM young adults **D-age**. Implications SGM individuals have disproportionately high smoking prevalence **B-prv**. It is unclear whether smoking cessation **B-ces** interventions **P-trt** culturally tailored to the SGM community are more **R-rel** effective than non-tailored interventions **P-trt**. This pilot trial found preliminary evidence that an SGM-tailored Facebook smoking cessation **B-ces** intervention **P-trt** increased reported abstinence **B-ces** from smoking, compared to a non-tailored intervention **P-trt**. Trial Registration NCT03259360.nan