

Overview

Smoking during pregnancy poses significant health risks to both the birthing parent who smokes and their baby. Financial incentive interventions, often referred to as contingency management (CM) in the substance use research field, are a behavioral treatment where patients earn monetary rewards for positive behaviors such as abstaining from use of a substance or participating in therapy. Incentive interventions are the most effective treatment for smoking cessation in pregnancy, but typically require frequent in-person clinic visits, which limits treatment access for people who live in rural areas. A recent pilot study is the first of its kind to demonstrate the efficacy of using a smartphone-based application (“app”) to deliver a financial incentives intervention for smoking cessation during pregnancy.

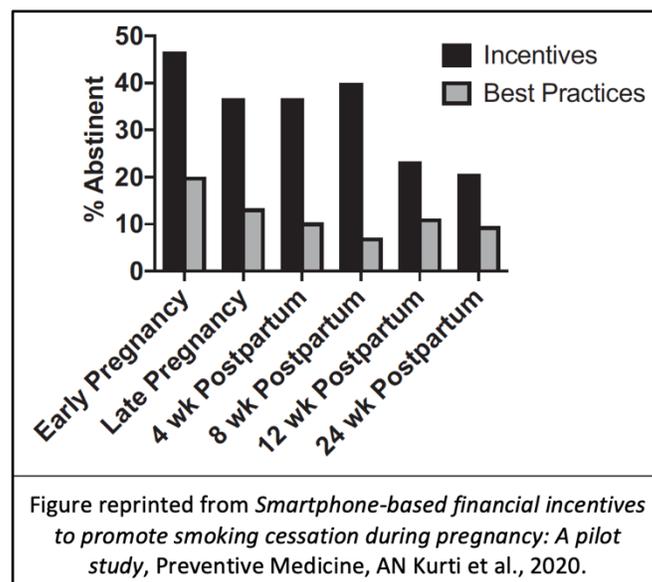
Methods



Sixty pregnant people who smoke were recruited from more than 30 US states primarily via Facebook. Participants were assigned to one of two treatments. One group received current best practice treatment for smoking cessation, which involves brief cessation counseling and referral to state quit lines. The other received best practices plus financial incentives delivered via the app (DynamCare Health, Inc., Boston MA). Participants in this group submitted breath and saliva samples remotely using the app. When these samples indicated that they had not been smoking, money was added to a debit card given to participants by the study. Participants received incentives throughout pregnancy and for the first 12 weeks postpartum.

Findings

- Consistent with prior clinic-based studies, participants receiving incentives had nearly 3 times greater odds of abstaining from smoking than the best practices group at a late-pregnancy assessment.
- Higher rates of abstinence were maintained well into the postpartum period, although differences between groups declined around the time the incentives ended and suggest the need for continued incentives or other cessation support postpartum, which could reduce infant secondhand smoke exposure and further improve health outcomes.
- This smartphone-based CM intervention can help expand treatment access to rural-dwelling and other historically under-served populations, may aid in reducing health disparities, and could have a substantial positive impact on maternal and infant health outcomes.



Learn More

“[Smartphone-based financial incentives to promote smoking cessation during pregnancy: A pilot study](#)” was published online in Preventive Medicine in July 2020. UVM CORA has trained educators available to support providers in the use of financial incentives for smoking and other substance use disorders. Reach out to cora@uvm.edu for consultation free of charge or for assistance in accessing additional materials related to this topic.