Abstract:

A major strategy to reduce harm from tobacco is lowering the nicotine content and delivery down to levels at which they are no longer addictive. The effectiveness of this strategy needs to be demonstrated in different populations whose response to reduced nicotine content (RNC) cigarettes might be substantially mediated by personal or environmental factors. For example, blacks have a lower quit rate than whites, and low socioeconomic status (SES) continues to be a major predictor of smoking. Low SES smokers may be particularly susceptible to smoking because they live in more distressed conditions. Low SES smokers are less likely to quit and are more highly dependent. To address the policy question of whether progressively lowering nicotine content in cigarettes can reduce or eliminate nicotine dependence in low SES smokers, we will randomize smokers to either an RNC group with a gradual step-wise reduction in nicotine from 11 mg to 0.3 mg per cigarette in 5 4-wk stages, or a control group with nicotine content that approximately matches the nicotine content of their usual brand of cigarettes. To measure harm associated with this strategy, we will measure a battery of tobacco smoke biomarkers.