

American Cancer Society – Institutional Research Grants 2014

“The cost-effectiveness of using nicotine replacement therapy and financial incentives to promote utilization of smokers’ quitlines and smoking cessation among Asian-language speakers: a randomized, controlled pilot trial”

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Background

Smokers’ quitlines have been suggested effective and cost-effective in promoting smoking cessations among smokers, including those in traditionally underserved populations. However, fewer studies aimed to tackle the initial obstacle in smokers’ quitline operation: making the smokers pick up the phone and call. Previous studies have suggested that providing small material incentives such as nicotine replacement therapy (NRT) was effective to recruit smokers into quitline services. However, no studies have assessed whether financial incentives can be used as an alternative promotion strategy to increase call volumes. Furthermore, no evidence examined the relative impacts of NRT and financial incentives in terms of both cost and effectiveness.

Another knowledge gap in smokers’ quitline services is the lack of effective strategies to promote quitline utilization among Asian-language speakers. The promotion strategies of quitlines have been traditionally targeted to general population in the U.S., with little efforts tailored to underserved subpopulations including Asian Americans, an ethnic population growing fastest in the U.S. The language barriers among Asian-language speakers may have made smokers who are not proficient in English speaking less likely to request counseling in smokers’ quitlines. Virtually nothing is known about the cost-effective strategies to promote utilization of quitlines in this disadvantaged population.

Objective/Hypothesis

We propose to fill the critical gaps in our understanding of promoting utilization rates of smokers’ quitline services among Asian-language speakers. Specifically, we hypothesize that using NRT and small financial incentives are feasible approaches to recruit Asian-language speaking smokers to quitline services; both approaches are cost-effective to promote quitline utilization rates, relative to doing nothing scenario.

Specific Aims

The following specific aims will be addressed:

Primary Aim: to determine the feasibility of providing NRT and financial incentives to promote the utilization of Asian Smokers’ Quitline, a national-wide Asian-language quit smoking service, among Asian-language smokers.

Secondary Aim: to evaluate the cost-effectiveness of using NRT and using financial incentives to increase the utilization of Asian Smokers' Quitline services. Cost-effectiveness results will be expressed as incremental cost effectiveness ratio (ICER) - cost per additional caller.

Exploratory Aim: to assess 3-month smoking cessation outcomes among smokers who are recruited with different incentives.

Study Design

A randomized, controlled trial study design will be employed in this pilot study.

Cancer Relevance

Smoking is the leading cause of cancer and cancer-related deaths. It causes cancers of lung, throat, mouth, nasal cavity, stomach, kidney and many others. Each year, cigarette smoking causes approximately 443,000 deaths in the U.S. Although smoking prevalence has been decreased dramatically during the past two decades, there was no increasing trend in population cessation rate.

Should this pilot study reveal the feasibility and preliminary data of using NRT and financial incentives to promote quitline utilization, we will be able to use these findings for the application of a larger-scale study which will expand the research scope and recruit larger sample. The goal of the research is to inform state smokers' quitlines of the cost-effective strategies to increase the use of quitline services, and ultimately, increase smoking cessation rates and reduce smoking-related cancer incidences and deaths among the underserved population.