

## Intervention IP-076: Faith Moves Mountains: A CBPR Appalachian Wellness & Cancer Prevention Program

### Summary

This intervention took place in six counties of rural Appalachian Kentucky where local lay health advisors delivered a 12-week Cooper/Clayton Method to Stop Smoking program, leveraging sociocultural factors (i.e., religious participation). With post-intervention data from 92% of participants, those in intervention group churches had 13.6 times higher odds of reporting quitting smoking one month post-intervention. This intervention has strong potential to reduce smoking rates and improve individuals' health.

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### Overview

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**Purpose of Intervention:**

To increase tobacco quit rates through a group-randomized community-based intervention in six Appalachian counties

**Intervention Type:**

Research-Tested — *Interventions with strong methodological rigor that have demonstrated short-term or long-term positive effects on one or more targeted health outcomes to improve minority health and/or health disparities through quantitative measures; Studies have a control or comparison group and are published in a peer-review journal; No pilot, demonstration or feasibility studies.*

### Intervention Details

**Intervention was Primarily Driven, Led, or Managed by:**

Both Community and Academic/Clinical Researchers

**Citations:**

- Schoenberg NE, Bundy HE, Baeker Bispo JA, Studts CR, Shelton BJ, Fields N. A rural Appalachian faith-placed smoking cessation intervention. *Journal of religion and health*. 2015 Apr;54(2):598-611.  
Relevance: Main Intervention
- Schoenberg NE, Studts CR, Shelton BJ, Liu M, Clayton R, Bispo JB, Fields N, Dignan M, Cooper T. A randomized controlled trial of a faith-placed, lay health advisor delivered smoking cessation intervention for rural residents. *Preventive medicine reports*. 2016 Apr 2;3:317-23. doi: 10.1016/j.pmedr.2016.03.006.  
eCollection 2016 Jun.  
Relevance: Post-Intervention Outcomes, Evaluations and Assessments

**Adaptation of Another Research-based Intervention:**

Yes

**Name of Original Intervention:**

The Cooper Clayton Method to Stop Smoking

**Name of Original Intervention Author:**

Richard Clayton, Professor Emeritus, University of Kentucky College of Public Health Department of Health Behavior and Society, clayton@uky.edu

**URL to original Intervention:**

Not available

**Citations:**

- Clayton, R., Cooper T, (2004) The Cooper/Clayton Method to Stop Smoking, Institute for Comprehensive Behavioral Smoking Cessation.

**Intervention Primary Outcomes were comparable to the original:**

Yes

### Contact Information

**Primary Contact Name:**

Nancy Schoenberg

**Primary Contact Affiliation:**

Department of Behavioral Science, University of Kentucky, Lexington, KY 40536-0086

**Intervention URL:**

None

**Primary Contact Email:**

nesch@uky.edu

**Primary Contact Phone Number:**

859-323-8175

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## Results

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**Intentions**

**Improve minority health or the health of other populations with health disparities (e.g. rural populations, populations with low SES)**

**Intervention Primary Outcome:**

Self-reported smoking status

**Intervention Secondary Outcome:**

Fagerström nicotine dependence, self-efficacy, and decisional balance

**Key Findings:**

With post-intervention data from 92% of participants, those in intervention group churches (N = 383) had 13.6 times higher odds of reporting quitting smoking one month post-intervention than participants in attention control group churches (N = 154, p b 0.0001). In addition, although only 3.2% of attention control group participants reported quitting during the control period, 15.4% of attention control participants reported quitting smoking after receiving the intervention. A significant dose effect of the 12-session Cooper/Clayton Method was detected: for each additional session completed, the odds of quitting smoking increased by 26%.

**Statistical Method Used:**

Intervention efficacy comparing the proportion of smokers at post-test 1 between intervention and attention control group churches were examined using individual level marginal modeling with generalized estimating equations (GEEs).

**Was statistical method used to analyze data from original Intervention comparable to the original:**

Yes

## Evaluations and Assessments

**Were Any of the Following Assessments Conducted (Economic Evaluation, Needs Assessment, Process Evaluation)?:**

No

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## Demographic and Implementation Description

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**Diseases, Disorders, or Conditions:**

Cancer/Malignant Neoplasms, Cardiovascular Diseases, Cerebrovascular Diseases, Addiction, Substance Use/Abuse

**Race/Ethnicity:**

Unspecified

**Populations with Health Disparities:**

People with Lower Socioeconomic Status (SES), Underserved Rural Communities

**Age:**

Young Adults (18 - 39 years), Middle-Aged Adults (40 - 64 years), Older Adults (65+ years)

## Socio-demographics / Population Characteristics

**Community Type:**

Rural

**Other Populations with Health Disparities:**

People with Low Education

**Geographic Location:**

Kentucky

**Socio-Economic Status:**

Low SES

**Minority Health and Health Disparities Research Framework**

		Levels of Influence			
		Individual	Interpersonal	Community	Societal
<b>Determinant Types</b>	<b>Biological</b>	✓			
	<b>Behavioral</b>	✓			
	<b>Physical / Built Environment</b>	✓	✓	✓	✓
	<b>Sociocultural Environment</b>	✓	✓	✓	
	<b>Health Care System</b>				

**Community Involvement**

The community's role in different areas of the Intervention (Choices are "No Role", "Participation", and "Leadership"):

**Design:**

Leadership

**Dissemination:**

Leadership

**Evaluation:**

Participation

**Implementation:**

Leadership

**Outreach:**

Leadership

**Planning :**

Leadership

**Recruitment:**

Leadership

**Sustainability:**

Participation

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**Characteristics and Implementation**

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**Intervention Focus Area:**

Behavior Change

**Disease Continuum:**

Primary Prevention

**Delivery Setting:**

Local Community (e.g. Barbershops, Beauty / Hair Salon, Laundromats, Food Markets, Community Centers), Houses of Worship

**Mode of Delivery:**

In-person

**Who delivered the Intervention?:**

## **Conceptual Framework**

### **Intervention Theory:**

Social Cognitive / Social Learning Theory, Social Identity Theory, Social Support / Social Network Theory, Social Systems Theory

### **Intervention Framework:**

Social Determinants of Health Conceptual Framework, Social Ecological Model

## **Implementation**

### **Intervention Study Design:**

Cluster Randomized Controlled Trial

### **Targeted Intervention Sample Size:**

590

### **Actual Intervention Sample Size:**

585

### **Start Year:**

2009

### **End Year:**

2013

## **Intervention Exposures**

### **Duration of Intervention/How Long it Lasted:**

7-9 months

### **Frequency of Intervention Delivery:**

Every Three Months

### **Number of Sessions/Meetings/Visits/Interactions:**

More than 10 Sessions

### **Average Length of Each Session/Meeting/Visit/Interaction:**

1-2 Hours

### **Format of Delivery:**

Group (e.g. Community leaders)

### **Highest Reading Level of Intervention Materials Provided to Participants:**

Grade 8-9

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## **Adaptations and Modifications**

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**Were modifications made?**

<b>Intervention Elements</b>	<b>Modified</b>
Content	No
Context	Yes
Implementation	Yes
Funding	No
Organization	Yes
Participants	No
Providers	Yes
Sociopolitical	No
Stages of Occurrence	Yes

## **Modification Details**

	<b>Explanation</b>
<b>Context</b>	
Personnel, Population, Setting	The intervention delivery personnel were modified from professionals to lay health advisors. The population changed from patients to all people, specifically church goers. The setting changed from public health departments to community settings, particularly churches.
<b>Implementation</b>	
Delivery	The delivery was modified to include additional social activities rather than holding the sessions and having everyone leave immediately thereafter. We added a social hour.
<b>Organization</b>	
Availability of Staffing / Technology / Space, Culture / Climate / Leadership Support, Location	We modified the staffing to use well trained and certified lay health advisors rather than public health professionals. The space and location was modified to “go to where the people/potential participants were” – community settings rather than the public health clinic and the climate was altered to focus on social interactions rather than only educational/behavior change. Participants suggested this change because quitting smoking is hard enough—doing it alone or without a lot of social support seemed overwhelming.
<b>Providers</b>	
None	Our providers, all lay health advisors rather than professionals, focused on working with underserved rural residents and understanding their unique circumstances rather than considering the behavior or the program only; social context was a consideration.
<b>Stages of Occurrence</b>	
Implementation, Planning/Pre-implementation/Pilot	The intervention was modified prior and during the intervention to reflect local circumstances.

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## **Impact, Lessons, Components**

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### **Produced an impact or change beyond the primary or secondary outcome:**

Yes

Some of the settings (churches, community settings) began to offer more health programming. Also, many of our lay health advisors took on additional positions and their capacities grew so they could engage in other employment opportunities.

### **Essential Aspects for Success:**

Researchers need to be present in the community often and offer a non-judgmental environment; provide a needed service where people live

### **Intervention Impact:**

Some of the settings (churches, community settings) began to offer more health programming. Also, many of our lay health advisors took on additional positions and their capacities grew so they could engage in other employment opportunities.

## Lessons Learned

### **Key Lessons Learned and/or Things That Could be Changed or Done Differently:**

We learned the importance of starting a behavioral change intervention when (and only when) participants are ready without assuming that an environment is not conducive to hosting an intervention. We learned the importance of trusted local people.

## Insights Gained During Implementation

<b>Insight Category</b>	<b>Insight Description</b>
Logistics	It takes a while to embed an intervention in an unconventional setting; there is variation in these settings (some with meeting space). The community leader must be on board and advocate for your program and it's best if they also participate in the program.
Equipment / Technologies	At the time, rural connectivity to internet and cell phone was minimal and could never be relied on. The same is often true 10 years later.
Training / Technical Assistance	Training had to be modified to accommodate interventionists who had never worked in health, but were viewed very favorably. Human subjects protection training was essential to ensure confidentiality and privacy concerns were honored.
Recruitment	We had to be patient and accept low initial enrollment. We waited about a year before we were invited to do our intervention in the churches. Once one small rural church hears about a program others want to be included, so rolling and snowballing recruitment was possible.

## Intervention Components

### **Intervention Has Multiple Components:**

No

### **Assessed Each Unique Contribution:**

N/A

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## Products, Materials, and Funding

### **Expertise, Partnerships, and Funding Sources**

	<b>Used for Implementation</b>	<b>Needed for Sustainability</b>
<b>Expertise</b>		
Community mobilization, community organization/coalition building	Yes	Yes
<b>Partnerships</b>		
Community groups (e.g. faith-based organizations, barbershops, beauty-salons, laundromats, food markets, community centers, cultural associations, tribal groups)	Yes	Yes
<b>Funding Sources</b>		
Public funding (e.g., federal, state or local government)	Yes	No

## Product/Material/Tools

	Tailored For Language	Language(s) if other than English	Material
<b>Outreach/Recruitment Tools</b>			
Liability Form	No		<a href="https://www.kcp.uky.edu/community/tobacco/cooperclayton/toolkit/Weekly%20Classes/Intro%20Week/Partici">https://www.kcp.uky.edu/community/tobacco/cooperclayton/toolkit/Weekly%20Classes/Intro%20Week/Partici</a>
Publicity Materials (e.g. Posters, Flyers, Press Releases)	No		Attachment available for request at the bottom of the page.
<b>Participant Educational Tools</b>			
Brochures/Factsheets/Pamphlets	No		<a href="https://www.kcp.uky.edu/community/tobacco/cooperclayton/toolkit/Bookmarks/BookmarkRecruitBack.pdf">https://www.kcp.uky.edu/community/tobacco/cooperclayton/toolkit/Bookmarks/BookmarkRecruitBack.pdf</a>
<b>Measurement Tools</b>			
Non-Standardized Instruments/Surveys/Questionnaires	No		<a href="https://www.kcp.uky.edu/community/tobacco/cooperclayton/toolkit/Weekly%20Classes/Week%2012/Participa">https://www.kcp.uky.edu/community/tobacco/cooperclayton/toolkit/Weekly%20Classes/Week%2012/Participa</a>
Non-Standardized Instruments/Surveys/Questionnaires	No		<a href="https://www.kcp.uky.edu/community/tobacco/cooperclayton/toolkit/Weekly%20Classes/Intro%20Week/Partici">https://www.kcp.uky.edu/community/tobacco/cooperclayton/toolkit/Weekly%20Classes/Intro%20Week/Partici</a>
Standardized Instrument/Measures	No		<a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2893294/">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2893294/</a>
Standardized Instrument/Measures	No		<a href="https://www.sciencedirect.com/science/article/abs/pii/S0306460304003235">https://www.sciencedirect.com/science/article/abs/pii/S0306460304003235</a>
Standardized Instrument/Measures	No		<a href="https://psycnet.apa.org/record/1983-26480-001">https://psycnet.apa.org/record/1983-26480-001</a>
Non-Standardized Instruments/Surveys/Questionnaires	No		<a href="https://www.kcp.uky.edu/community/tobacco/cooperclayton/toolkit/Weekly%20Classes/Week%2012/Class%2">https://www.kcp.uky.edu/community/tobacco/cooperclayton/toolkit/Weekly%20Classes/Week%2012/Class%2</a>

## Implementation Materials and Products

	Material
<b>Implementation/Delivery Materials</b>	
Coordinator or Facilitator's Guides	<a href="https://www.kcp.uky.edu/community/tobacco/cooperclayton/toolkit/Toolkit%20updated%20July%202013.pdf">https://www.kcp.uky.edu/community/tobacco/cooperclayton/toolkit/Toolkit%20updated%20July%202013.pdf</a>
Coordinator or Facilitator's Guides	<a href="https://ebccp.cancercontrol.cancer.gov/uploads/RTIPS/-=RT=-/WHE/DoHHS/NIH/NCI/DCCPS/7504.pdf;jsessionid=4EC02D1AD150EB153C10192530E415B5">https://ebccp.cancercontrol.cancer.gov/uploads/RTIPS/-=RT=-/WHE/DoHHS/NIH/NCI/DCCPS/7504.pdf;jsessionid=4EC02D1AD150EB153C10192530E415B5</a>
Curricula	<a href="https://www.kcp.uky.edu/community/tobacco/cooperclayton/toolkit/Weekly%20Classes/Intro%20Week/Curriculum_Introduction%20Week%20updated%205-2013.pdf">https://www.kcp.uky.edu/community/tobacco/cooperclayton/toolkit/Weekly%20Classes/Intro%20Week/Curriculum_Introduction%20Week%20updated%205-2013.pdf</a>
<b>Implementation/Output Materials</b>	
No Implementation/Output Materials provided.	

## Articles Related to Submitted Intervention

	Article
<b>Reports/Monographs</b>	
No Reports/Monographs provided.	
<b>Additional Articles</b>	
Evaluation	Attachment available for request at the bottom of the page.
Quantitative findings	Attachment available for request at the bottom of the page.
Qualitative findings	Attachment available for request at the bottom of the page.
Methodology	Attachment available for request at the bottom of the page.

## **Materials Available for Request**

- Outreach\_recruitment tools Updated recruitment flyer with picture.pdf
- Author\_manuscript 2015 Schoenberg Rural Appalachian Faith-Placed Smoking Cessation Intervention.pdf
- Author\_manuscript 2016 Schoenberg Randomized controlled trial- faith-placed, lay health advisor delivered smoking cessation intervention, rural residents (1).pdf
- Author\_manuscript Kruger 2012 Perceptions of Smoking Cessation Programs in rural App.pdf
- Author\_manuscript Rural Religious Leaders' Perspectives on their Communities' Health Priorities and Health.pdf

Request Materials

Enter Email Address

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