

Kicking the Habit: Smoking Cessation In An Elderly Population

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Abstract

Adverse effects of tobacco smoke increase with age from cumulative toxicity. Cessation reduces smoking-induced disease, even among the elderly. Atomic Energy Commission former workers in Iowa—Ames Laboratory and at the Iowa Army Ammunition Plant (IAAP)—are at risk for occupational-related lung diseases such as pneumoconioses and cancer. Smoking may dramatically increase their risks. This project explores the interest of an elderly at-risk population in smoking cessation and the effectiveness of providing cessation resources through phone support and physician counseling.

Telephone interviews were conducted of 109 Former Worker Medical Screening Program participants who are current smokers and Iowa residents. Participants were offered cessation information and resources, including a call from a physician to discuss smoking cessation medications. Interested participants were mailed information packets. Follow-up calls were made to 26 participants for further evaluation of the intervention.

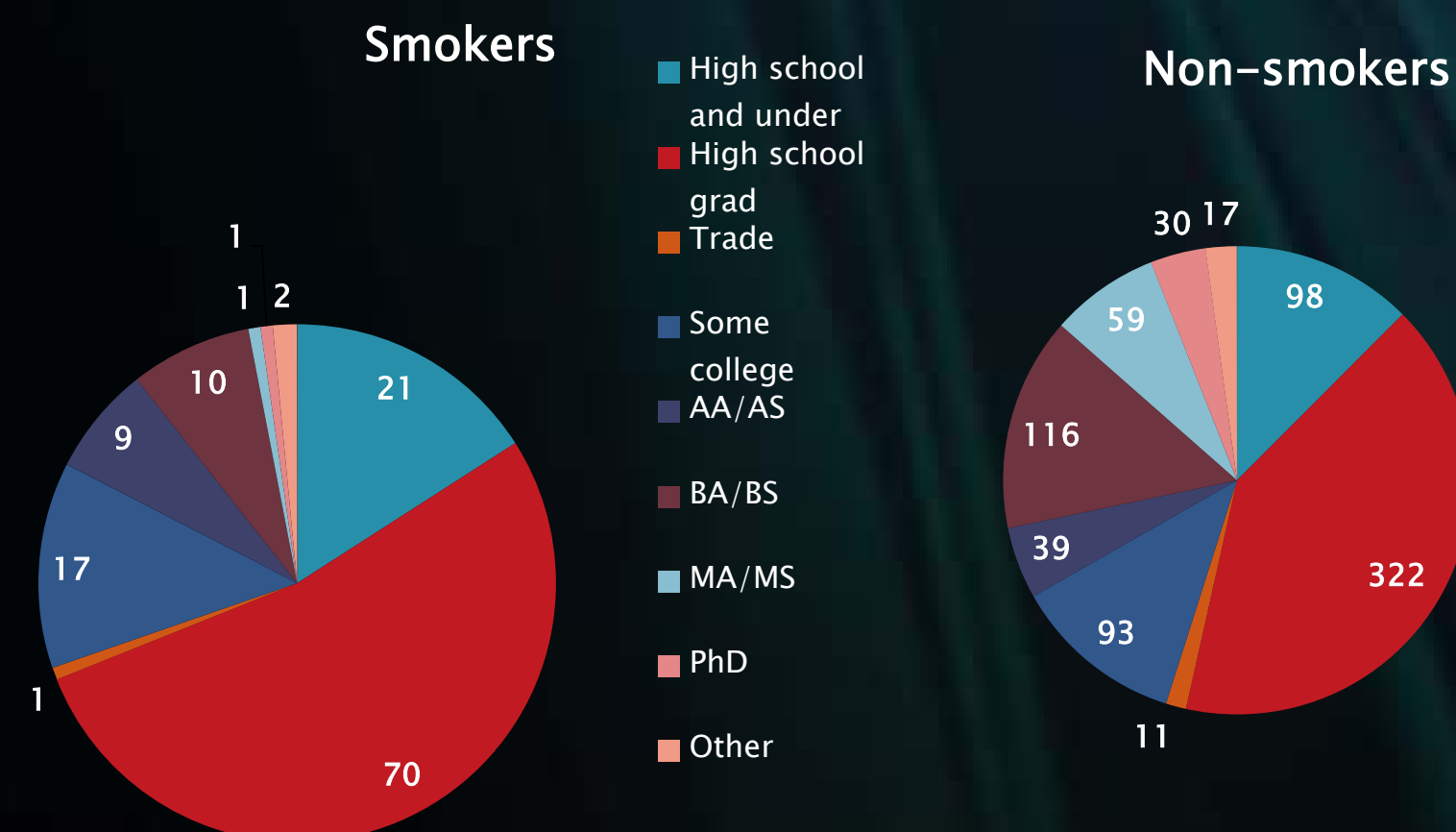
Thirty-two (29.4%) participants reported quitting after their first medical screening; 8 (7.3%) additional ex-smokers still used tobacco products (e.g., leaf tobacco, chewing tobacco, social smokers). Of the remaining smokers, 43 (39.4%) were interested and 5 (4.6%) might be interested in quitting, and 21 (19.3%) were not interested in quitting. Twenty-one participants requested phone counseling with the doctor, and 12 participants and a spouse were given smoking cessation prescriptions. From the 26 follow-up calls, 21 (80%) participants responded with a sustained interest in quitting since receiving the information and 13 (50%) reported a decided quit date and/or cessation method.

This geriatric population showed significant interest in smoking cessation. We will continue investigating the method's efficacy with more extensive participant follow-up. Physician contact and counseling can be an effective way to reach elderly smokers and encourage them to quit.

Demographics

Iowa AEC Former Workers (FW), n=109

Graph 1: Education of smokers and nonsmokers



Age	Average	Max.	Min.	St. Dev.
Smokers	68.1	88	49	7.6
Nonsmokers	71.1	95	23	10.9

Gender	Male	Female
Smokers	83.0%	17%
Nonsmokers	76.0%	24%

Table 1: Age and gender of smokers and nonsmokers

Race	Caucasian	African American	Hispanic	Mixed	Asian	Native American
Smokers	96.5%	2.1%	1.4%	0.0%	0.0%	0.0%
Non-smokers	94.8%	2.6%	1.4%	0.5%	0.4%	0.4%

Table 2: Race of smokers and nonsmokers

	Average	Max	Min	Std. Dev.
Age began smoking	18.9	51	10	6.3
Number of cigarettes smoked	22.0 cigs/day	90 cigs/day	2 cigs/day	13.1
Pack years	43.53	211.5	2.5	29.1

Table 3: Smoking Histories

Background: University of Iowa— Former Worker Program (UI-FWP)

• A medical screening program carried out by UI College of Public Health that monitors chronic health conditions of at-risk former AEC workers:
 • Line 1 / Division B at Iowa Army Ammunition Plant (IAAP), Burlington, IA
 • Ames Laboratory, Ames, IA

• Screenings began in 2001. Participants were encouraged by the doctor to quit smoking at the screening and/or in the screening results letter.

Goals of UI-FWP: *Identifying, locating, and providing screenings with medical evaluation of long term health effects that might have resulted from employment to former Line 1 IAAP and Ames Lab AEC workers employed in nuclear weapon production and research.*

Background

• Consequences of smoking occur disproportionately among the elderly (Burns, 2000).

• 70% of smoking-related excess mortalities occur in those aged 60+ (Burns, 2000).

• Cessation remains the most effective way of altering smoking-induced disease risks, even those aged 60+ (Burns, 2000)

• Only 39% of current, elderly smokers were advised to quit by their physician (Rimer, et al).

• Half of participants aged 65+ reported welcoming physician advice to quit and one-third said this advice increased their confidence in their ability to quit (Ossip-Klein, et al).

Research Goal

This project explores the interest level of an elderly, at-risk population in smoking cessation and the effectiveness of providing cessation resources.

Methods

• Cohort— 143 former AEC workers currently living in Iowa with positive or possible smoking histories at the time of their first screening

• 126 IAAP FW
 • 17 Ames Lab FW

• Phone interviews were utilized with the following goals:

- Confirm smoking history
- Determine number of patients who quit smoking since first screening and physician recommendation.
- Determine interest level in quitting
- Mail information packets with cessation resources
- Offer physician counseling re: cessation medications

• Additional information collected:

- Current smokers:
 - Quit attempts since FWP screenings
 - Previous methods of quit attempts
 - Success of previous quit attempts

- Ex-smokers since first screening:
 - Quit date
 - Reason for quitting
 - Successful quit method

• Follow-up phone calls

- Check if participant reaction to information packet
- Determine success of intervention

Results

• 109 out of 143 were successfully contacted and interviewed

• 39/109 considered themselves ex-smokers (see Graphs 2-4)
 > 8/39 Quit smoking but continue to use tobacco products (chew, socially smoke, etc.)
 > 32/39 Quit since first screening

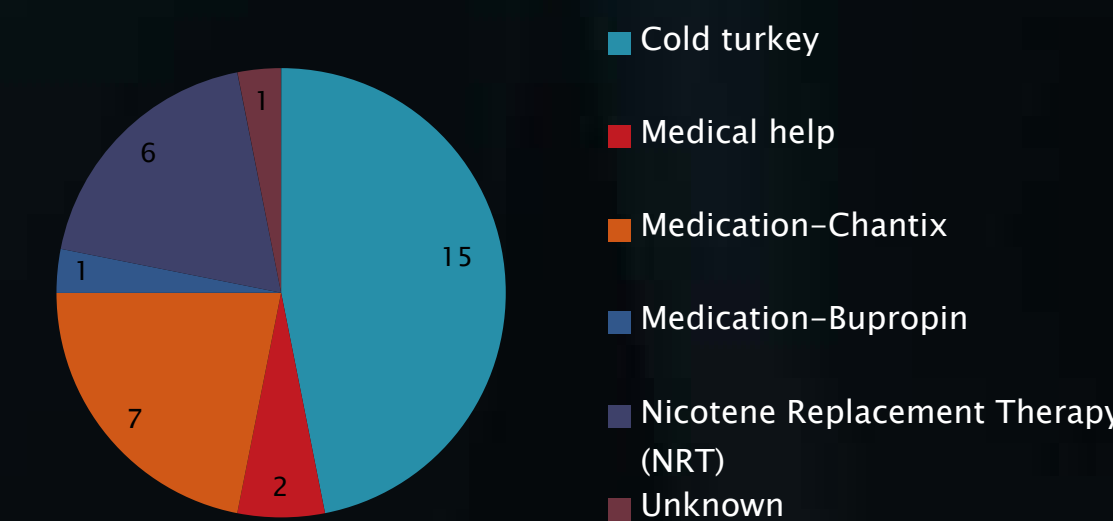
• 70/109 continue to smoke since their first screening
 > 40 tried to quit since screening (see Graph 5)
 > 20 more have tried to quit at least once before (see Graph 5)
 > 44/60 reported successful quit attempts for some period of time (either quit or cut back).

• 43/70 smokers reported a current interest in quitting
 > 5/70 might be interested
 > 22/70 were not interested
 • 3/22 still requested cessation information via mail

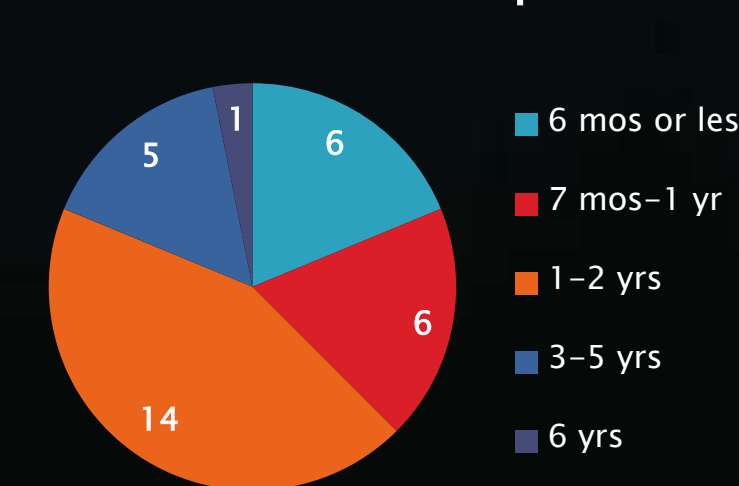
• 46/70 smokers were interested in cessation materials (see Graph 6)
 > 21 requested phone call from the physician/medication info
 > 12 and a spouse were mailed prescriptions for smoking cessation medications

• 26 follow-up calls were made 1-3 weeks after mailing resources
 > 21 (80%) reported sustained interest in quitting
 > 13 (50%) reported decided quit date or method

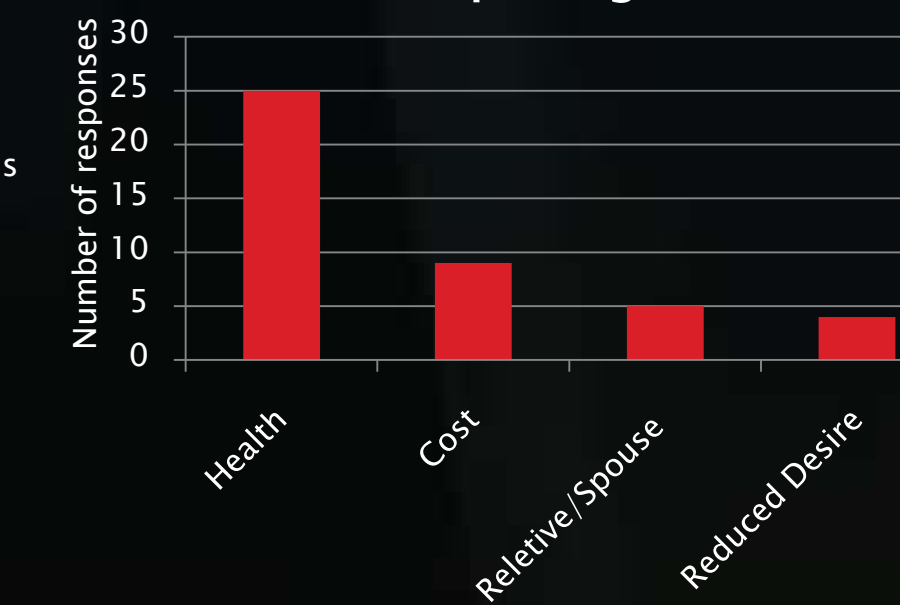
Graph 2: Ex-smokers' successful quit methods



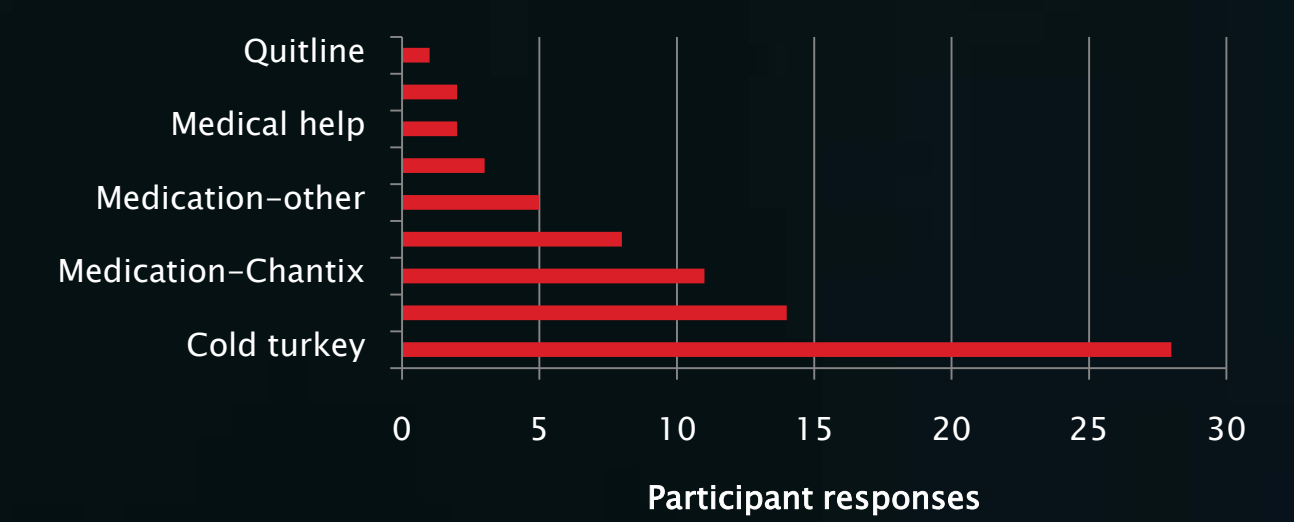
Graph 3: Length of time since ex-smokers quit



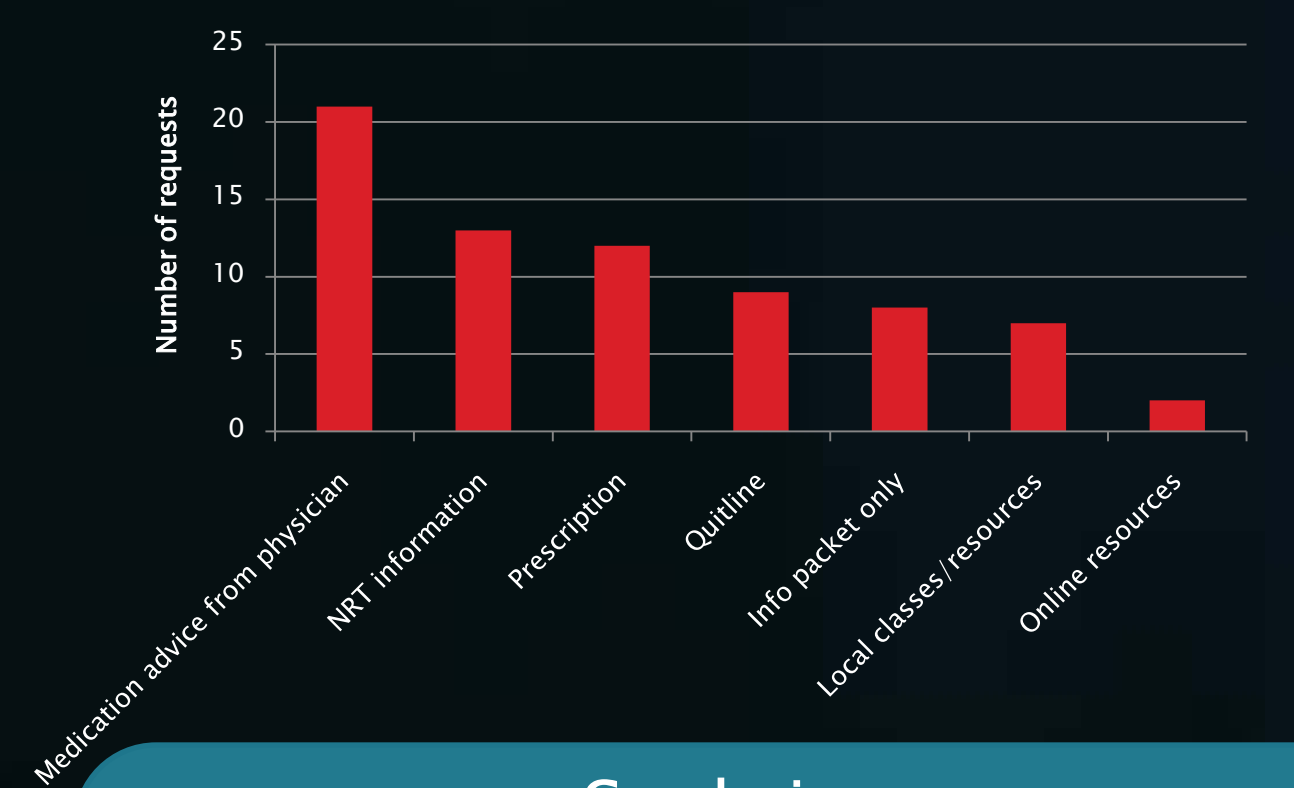
Graph 4: Ex-smokers' reasons for quitting



Graph 5: Current smokers previous quit attempts



Graph 6: Requested resources



Conclusions

This geriatric population showed significant interest in smoking cessation. We will continue investigating the method's efficacy with more extensive participant follow-up. Physician contact and counseling can be an effective way to reach elderly smokers and encourage them to quit.

Discussion

• Demonstrating physician interest in tobacco cessation was an important feature of this project. Proactively offering cessation resources rather than waiting for patients to ask was effective in delivering information and resources to patients who might not otherwise request them.

• Ossip-Klein, et al (2000) report only 42-59.7% of elderly smokers who saw a physician in a one-year period were advised to quit. Considering the high interest level demonstrated in this study, it is important to ensure that physicians are providing cessation resources.

• Study limitations: Additional long-term follow up would better demonstrate the successful quit rate resulting from the intervention.

The intervention was implemented through the office of an occupational health physician who has had little regular contact with the patients (screenings are once every 3 years). A patient's regular physician might be better equipped to provide the same service.

Financial concerns and lack of mobility due to already deteriorating health prevented part of this elderly, blue-collar population from filling prescriptions or accessing more costly resources. Isolation from family/friends already deceased also limits the support network available to an elderly population.

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