

Testing telephone counseling with smokeless tobacco users: The ChewFree Minnesota study

ChewFree Study Team

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Background

- In contrast to cigarette smoking, far less research has focused on evaluation of strategies to help smokeless tobacco (ST) users quit.
- Promising strategies?
 - Limited evidence re: the effectiveness of pharmacotherapy
 - Dental visits may be an important “teachable moment”
 - Phone counseling is a potentially useful adjunct to behavioral print materials

Background

- Boyle, Pronk, and Enstad (2004) recruited ST users from the Twin Cities metropolitan area through HealthPartners for a study evaluating the efficacy of a phone-based cessation intervention in comparison to a control group receiving no phone calls.
 - A significant 6 month treatment effect was observed:
 - Telephone group 40% quit rate
 - Manual only 25% quit rate

ChewFree Minnesota

- The aim of the ChewFree Minnesota study is to evaluate in a randomized controlled trial the relative effectiveness of two low intensity smokeless tobacco cessation programs among a state-wide sample of smokeless tobacco users:
 - Self-help manual alone
 - Self-help manual + proactive telephone-based counseling

Eligibility Criteria & Recruitment

- Eligibility criteria were intentionally broad:
 - Age 18 years or older
 - Minnesota resident
 - Access to a telephone
 - Using snuff or chew at least weekly
- Recruitment methods included:
 - Talk radio
 - Press releases and advertising in community newspapers
 - Community outreach (e.g., state and local health departments, regional health care providers, large employers, dental hygienists and dental offices)
- Interested ST users:
 - Called our state-wide toll-free telephone number (888-snuff free) or sent us an email.
 - Took part in a phone screening to assess eligibility
 - A consent form and the baseline survey were mailed to those who were eligible and interested

Self-help only

- Participants in this group received the smokeless tobacco self-help cessation guide and were instructed to read the cessation guide and to follow the suggestions for quitting smokeless tobacco

Proactive Telephone Counseling Group

- Participants were contacted by telephone and offered a series of 4 telephone calls with a trained tobacco cessation counselor.
- The first call was placed 3-10 days after the mailing of the self-help guide and lasted about 15-30 minutes. Goals of the first call were to:
 - Establish contact and develop rapport
 - Gather information about patterns of tobacco use, previous quit attempts, readiness to quit
 - Identify reasons for quitting, high-risk situations, and promote efficacy for change
 - Discuss preparing for a quit attempt and setting a quit date

Proactive Telephone Counseling Group

➤ Quit Attempts

- Most subjects required 1-2 calls to prepare for a quit attempt.
- Ideally, a call was placed during the first 3 days after a scheduled quit attempt

➤ Future Calls

- Subsequent calls were negotiated with the participant but were generally scheduled weekly
- The purpose of the subsequent calls was to discuss pertinent issues that arise in the process of quitting
- Status of ST use and effectiveness of quitting or preparation strategies were assessed at each call

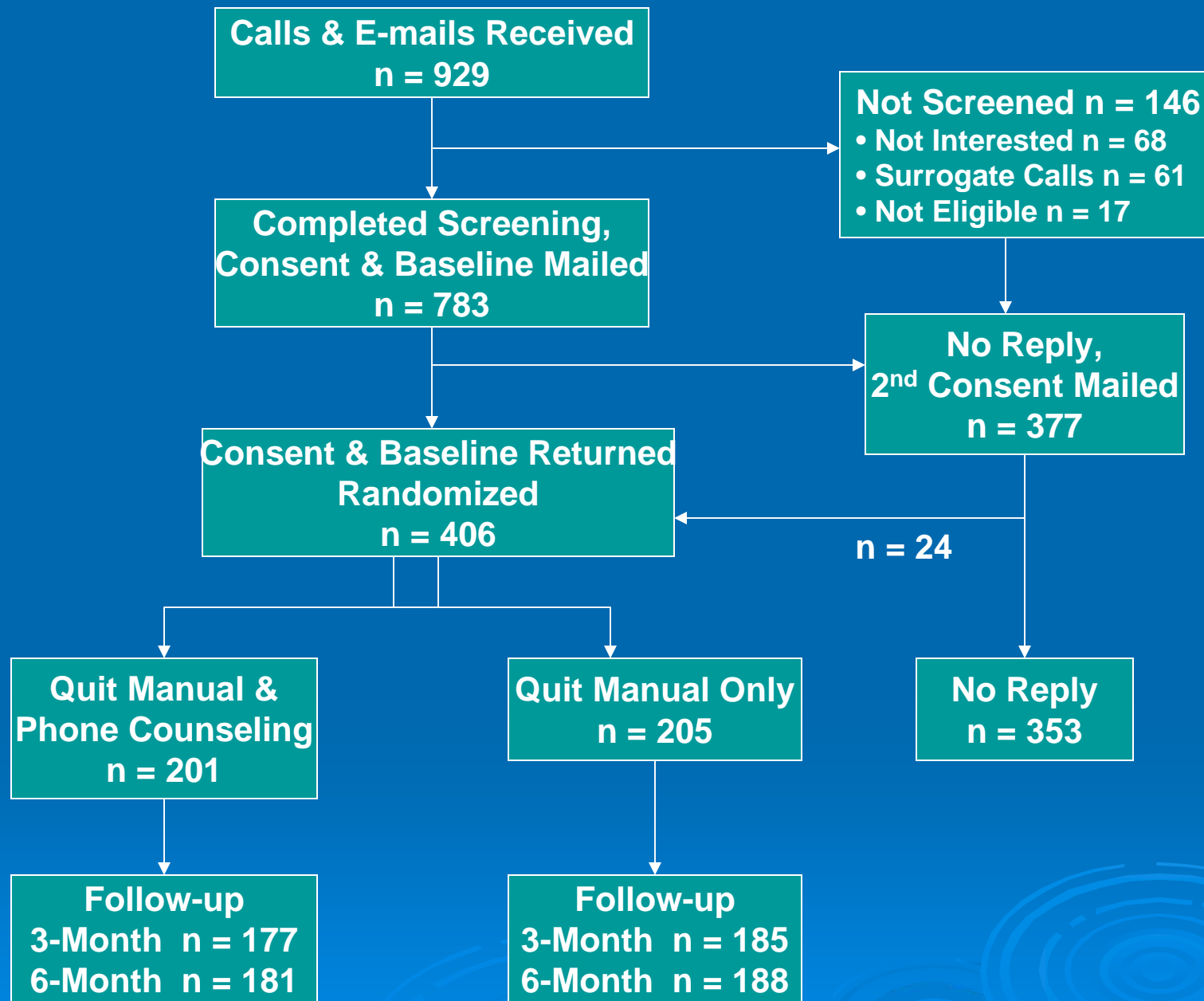
Study Outcomes

➤ Secondary Outcome:

- Point prevalence abstinence defined as:
 - Abstinence from all tobacco (chew, snuff, cigarettes, cigar, pipe) in the past 7 days

➤ Primary Outcome

- Prolonged abstinence defined as:
 - Meets point prevalence criteria
 - Sustained abstinence from snuff or other tobacco after an initial grace period (30 days) in which tobacco use is not counted as failure
 - This definition allow for slips in tobacco use as long as they are shorter than 7 days in a row and tobacco use does not occur two or more weeks in a row



Baseline Characteristics

Age 39.9 (10.9) yrs

Residence

7 county metro 38.7%

Non-metro 61.3%

Marital Status

Married or living with partner 81.8%

Race

% White 98.3%

Education

< high school 2.2%

High school or GED 15.3%

Tech school or some college 40.1%

College grad+ 42.4%

Baseline Characteristics

(n=406)

Daily use of smokeless tobacco	97.0%
Smokes cigarettes	6.2%
Ever used medications to help quit?	49.1%
Ebbert Dependence Scale	5.7 (2.2)
Readiness to quit	8.1 (1.8)

3 Month Abstinence Outcomes

	Manual only (n=205)	Manual + Phone Counseling (n=201)	P value
Point Prevalence Abstinence	16.6%	45.3%	< .001
Prolonged Abstinence	6.8%	30.9%	< .001

6 Month Abstinence Outcomes

	Manual only (n=205)	Manual + Phone Counseling (n=201)	P value
Point Prevalence Abstinence	19.5%	42.3%	< .001
Prolonged Abstinence	9.8%	30.9%	< .001

Manual + Phone Counseling Intervention Participation

- The mean number of counseling calls was 3.1, with a range from 0-4
- 61.7% completed all 4 counseling calls
- Prolonged abstinence measured at 6 months generally increased with more counseling calls (Mantel-Haenszel $\chi^2 (1) = 12.1, p < .001$).

0 calls	1 call	2 calls	3 calls	4 calls
6.3%	7.7%	25.9%	19.1%	39.5%

Quit strategies by treatment group

Tried...	Manual Only	Manual + Phone Counseling	P-value
Blending chew with mint or herbal	18.1	38.8	.001
Used mint snuff or herbal chew	26.6	57.9	.001
Switching to lower nicotine brand	41.0	37.1	.45

Quit strategies by treatment group

Tried...	Manual Only	Manual + Phone Counseling	P-value
Writing list of reasons to quit	39.9	52.3	.02
Setting a quit date	59.6	71.4	.02
Switching to lower nicotine brand	41.0	37.1	.45
Medications	24.5	18.5	.17

Quit strategies by treatment group

	Manual Only	Manual + Phone Counseling	P-value
Increased exercise or physical activity	42.6	55.1	.02
Used relaxation exercises	6.9	53.9	.001
Used family/friends for extra support	43.1	60.1	.001

Summary

- Participants assigned to the manual + phone counseling group reported higher point prevalence and prolonged abstinence rates at 3 and 6 month follow-up
- Participants in the manual + phone intervention were more likely to report:
 - Writing a list of reasons to quit
 - Setting a quit date
 - Blending chew with mint or herbal
 - Using mint snuff or herbal chew
 - Using relaxation exercises
 - Using friends/family for extra support
 - Increasing physical activity level
- Intervention participation was associated with better treatment outcomes

Conclusions

- Proactive phone-based counseling can be an effective strategy for improving cessation rates among smokeless tobacco users
- Trials to replicate these results are needed before widespread dissemination efforts are conducted