

Quit Rates among smokeless tobacco users calling a state quitline

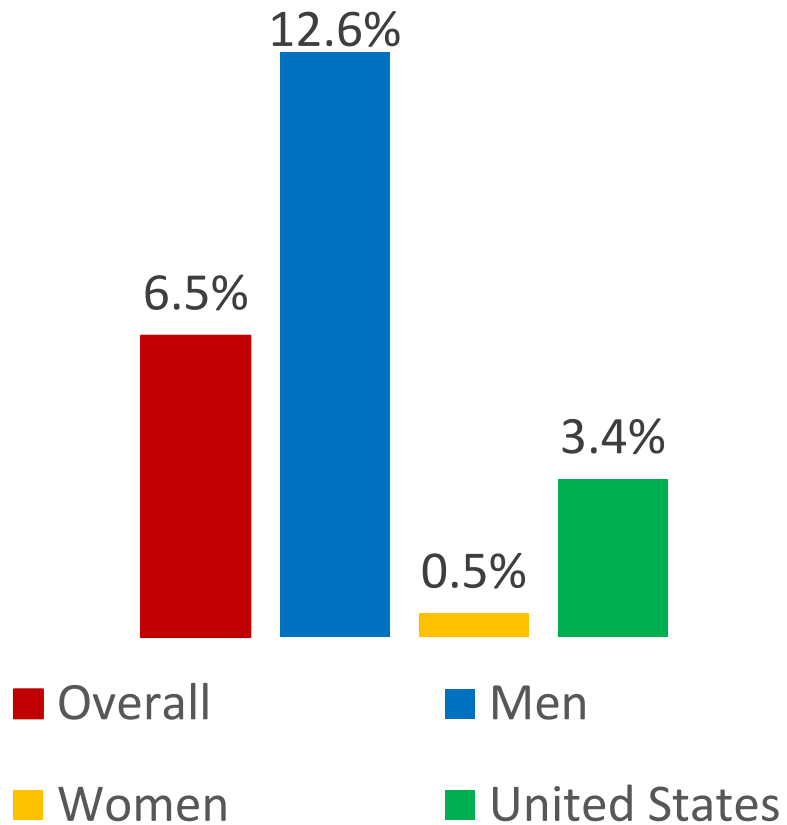
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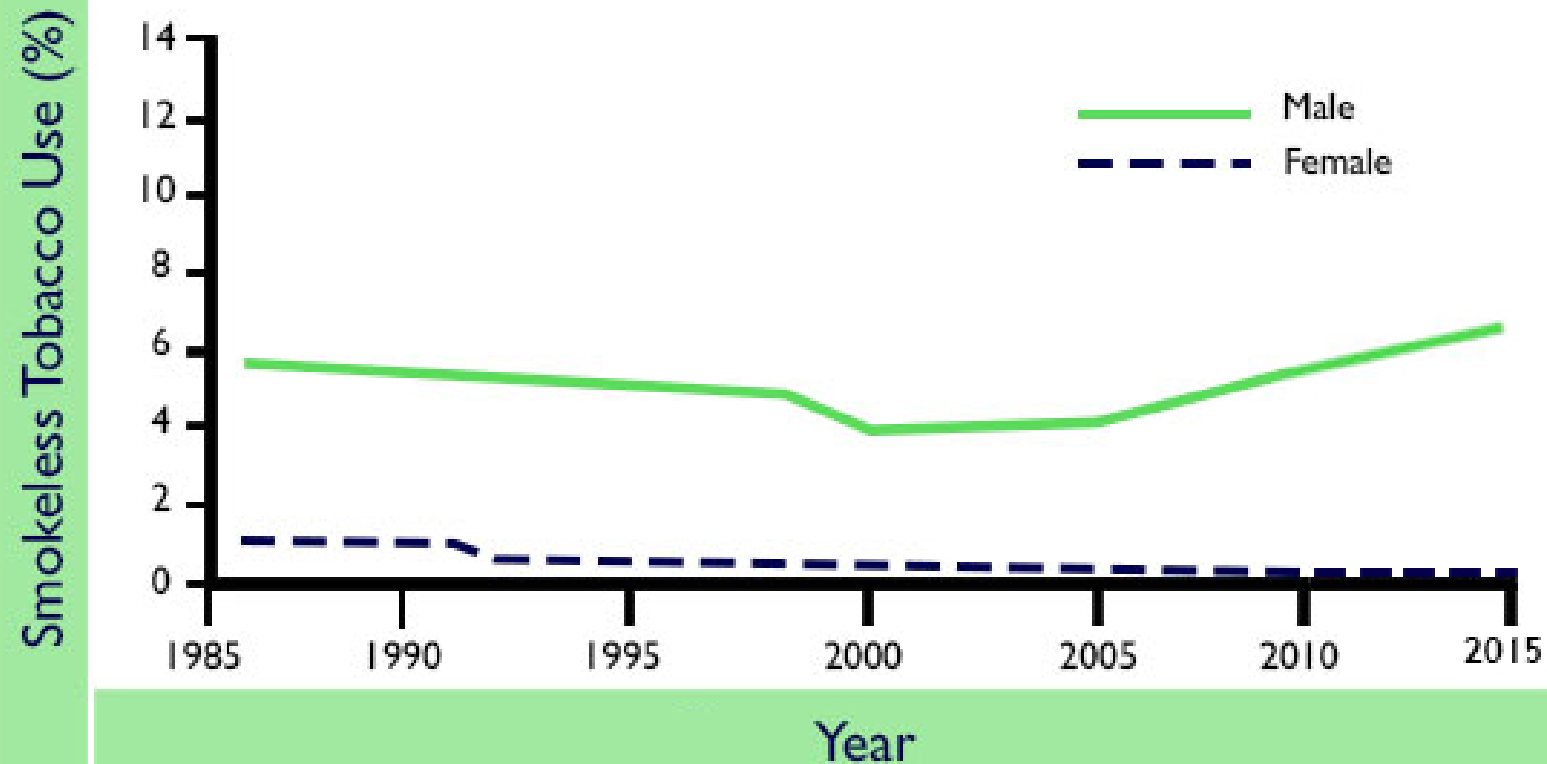
Prevalence of Smokeless Tobacco use in Oklahoma – 7th highest in the US



Oklahoma Overall: 6.5% (95% CI = 5.7, 7.3)
Oklahoma Men: 12.6% (95% CI = 11.2, 14.3)
Oklahoma Women: 0.5% (95% CI = 0.3, 0.9)

Source: Nguyen KH, Marshall L, Brown S, Neff L. State-Specific prevalence of current cigarette smoking and smokeless tobacco use among adults – United States, 2014. MMWR Morb Mortal Wkly Rep 2016, 65: 1045-1051. DOI: <http://dx.doi.org/10.15585/mmwr.mm6539a1>

Trends in prevalence (%) of smokeless tobacco use among adults 18 years of age and older, by gender and selected survey years



Source: U.S. Department of Health and Human Services. [The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General](#). Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014.

https://www.cdc.gov/tobacco/data_statistics/fact_sheets/smokeless/use_us/index.htm accessed 9-10-18

Quitlines and Smokeless Tobacco Users

Few studies establishing the efficacy of quitlines for smokeless tobacco users.

2008 Treating Tobacco Use and Dependence, also known as the Clinical Practice Guideline, identified the need for additional research related to the effectiveness of behavioral counseling and pharmacotherapy for the treatment of nicotine dependence among ST users.

In Oklahoma, about 8% of Helpline registrants report using smokeless tobacco, alone or in combination with cigarettes.

A previous Oklahoma study found that 43% of male exclusive smokeless tobacco users registering with the Helpline reported 30-day point prevalence abstinence at the 7-month follow-up. (Mushtaq, Boeckman et al. 2015)

In July 2015, the Oklahoma Tobacco Helpline launched its new services in an effort to expand access and reach.



Oklahoma Tobacco Helpline



ALL ACCESS

A comprehensive package of services that includes:

- Coaching call(s)
- Web coaching
- Supportive text messages
- Helpful emails
- A Quit Guide and other materials
- At least a two-week supply of FREE patches, gum or lozenges



WEB COACH

A private online community where you can access helpful digital tools, develop your own Quit Plan and track your progress. You'll receive:

- Helpful emails
- Web coaching
- Supportive text messages
- A Quit Guide
- A FREE Starter Kit with a two-week supply of patches, gum or lozenges

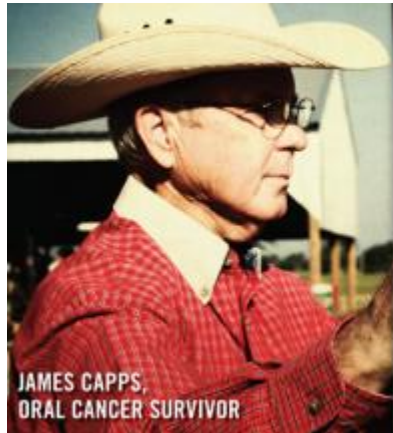


INDIVIDUAL SERVICES

A customized program that fits your needs. Choose the resources that are right for you, including:

- Supportive text messages
- Helpful emails
- A Quit Guide
- A FREE Starter Kit with a two-week supply of patches, gum or lozenges

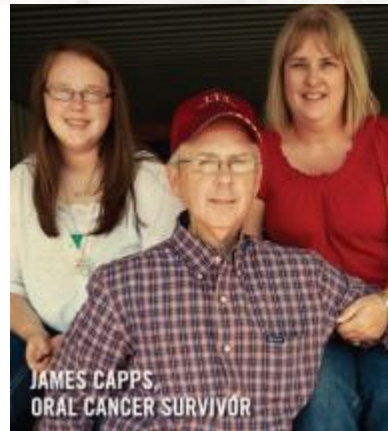
Helpline Promotion to ST Users



**“I thought dipping was for cowboys.
I found out cowboys get cancer, too.”**

Oklahoma Tobacco Helpline
1 800 QUIT NOW
1-800-784-8669 OKhelpline.com

TOBACCO STOPS WITH ME.com



**“Quitting dipping is a pain.
But nothing is worth the pain of cancer.”**

Oklahoma Tobacco Helpline
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TOBACCO STOPS WITH ME.com

Methods

The current study is a follow-up study to the original study published in 2015 (Mushtaq, Boeckman et al. 2015).

Oklahoma follows NAQC evaluation protocol in conducting its 7-month follow-up survey of a random sample of participants. 159 exclusive smokeless tobacco users were sampled for the follow-up and the response rate was **63.5%** for this population. Follow-up surveys are conducted by PDA, Inc.

Study participants are **101** male exclusive smokeless tobacco users who registered with the Oklahoma Tobacco Helpline for intervention services between July 2015 and October 2016 AND completed a follow-up evaluation survey via telephone 7- months after registration.

Methods

Sociodemographic factors and intrinsic and extrinsic behavioral factors were collected at registration and at the 7-month follow-up.

30-day tobacco point-prevalence abstinence rates were based on the respondent's self-report of being tobacco free for the last 30 days or more at the time of the seven-month survey.

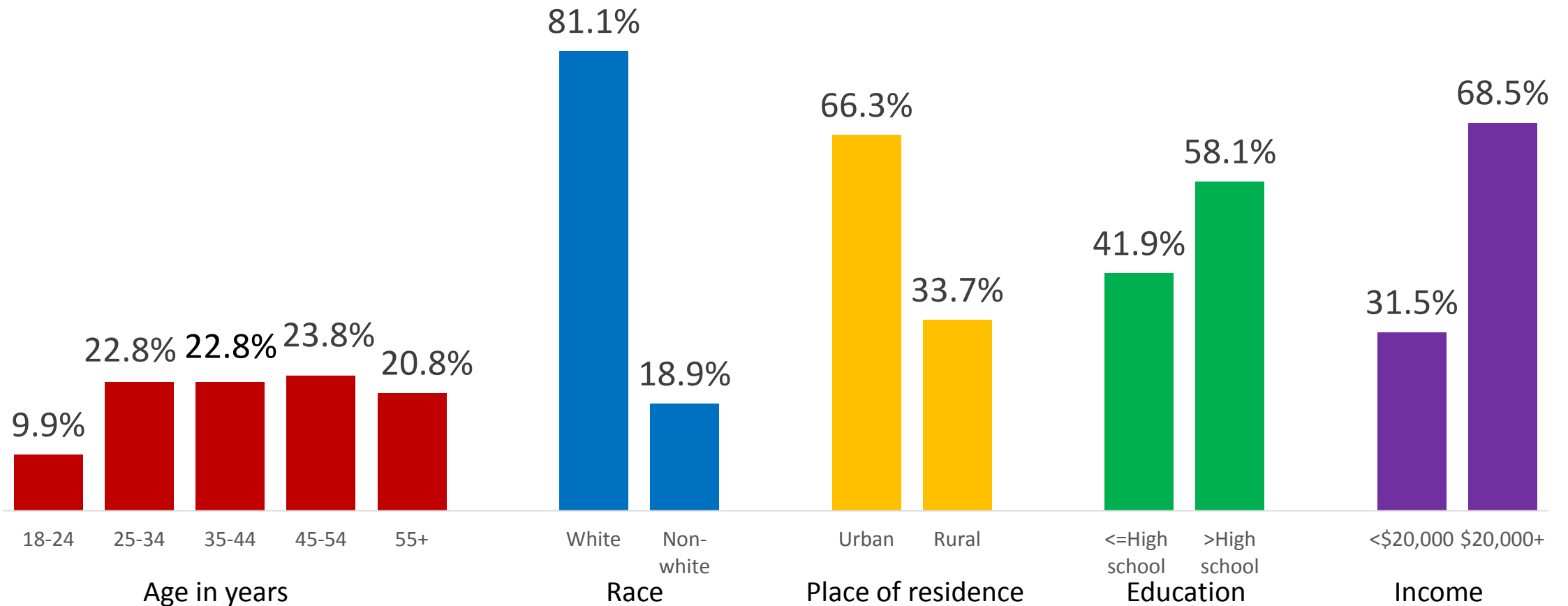
Crude Odds Ratios (ORs) and 95% confidence intervals (CIs) describe the association between selected covariates and 30-day abstinence. Statistical significance was based on $\alpha=0.05$.

Analyses were performed using SAS version 9.4 (SAS Institute Inc., Cary NC).

This study was approved by the University of Oklahoma Health Sciences Center IRB.

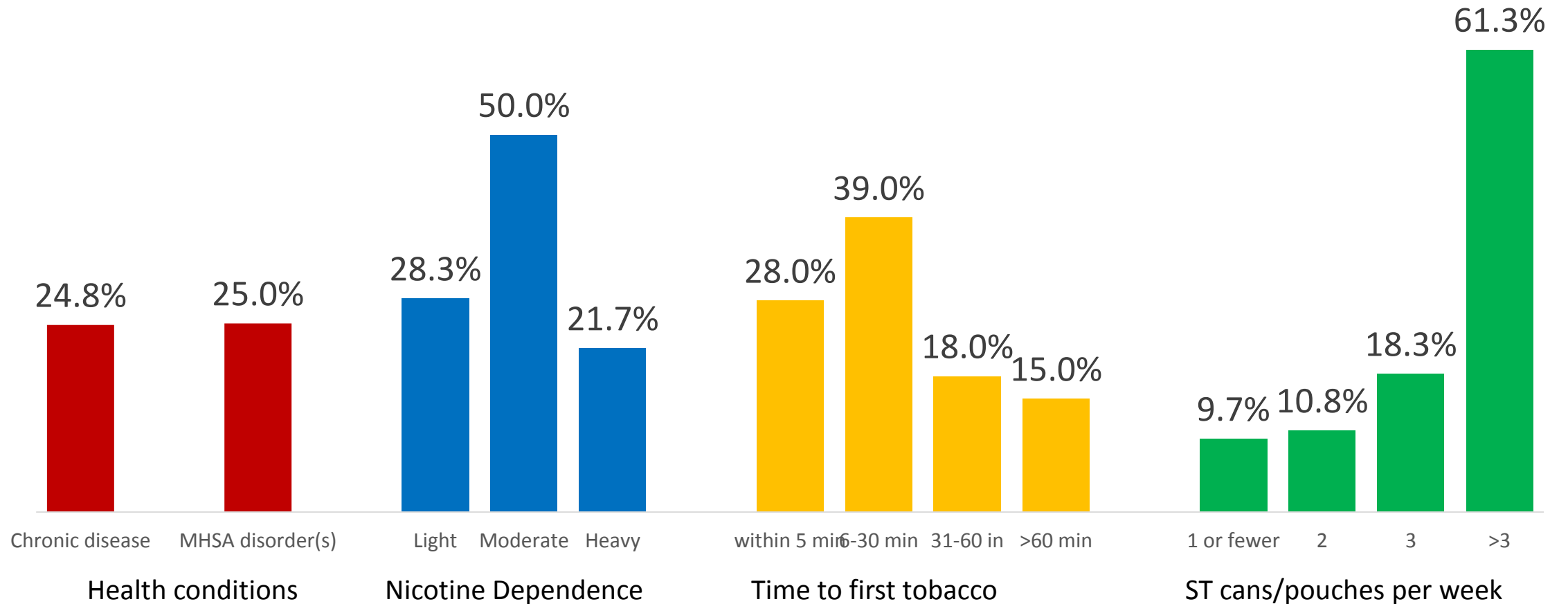
Participant characteristics at registration

n=101



Health status and dependence at registration

n=101



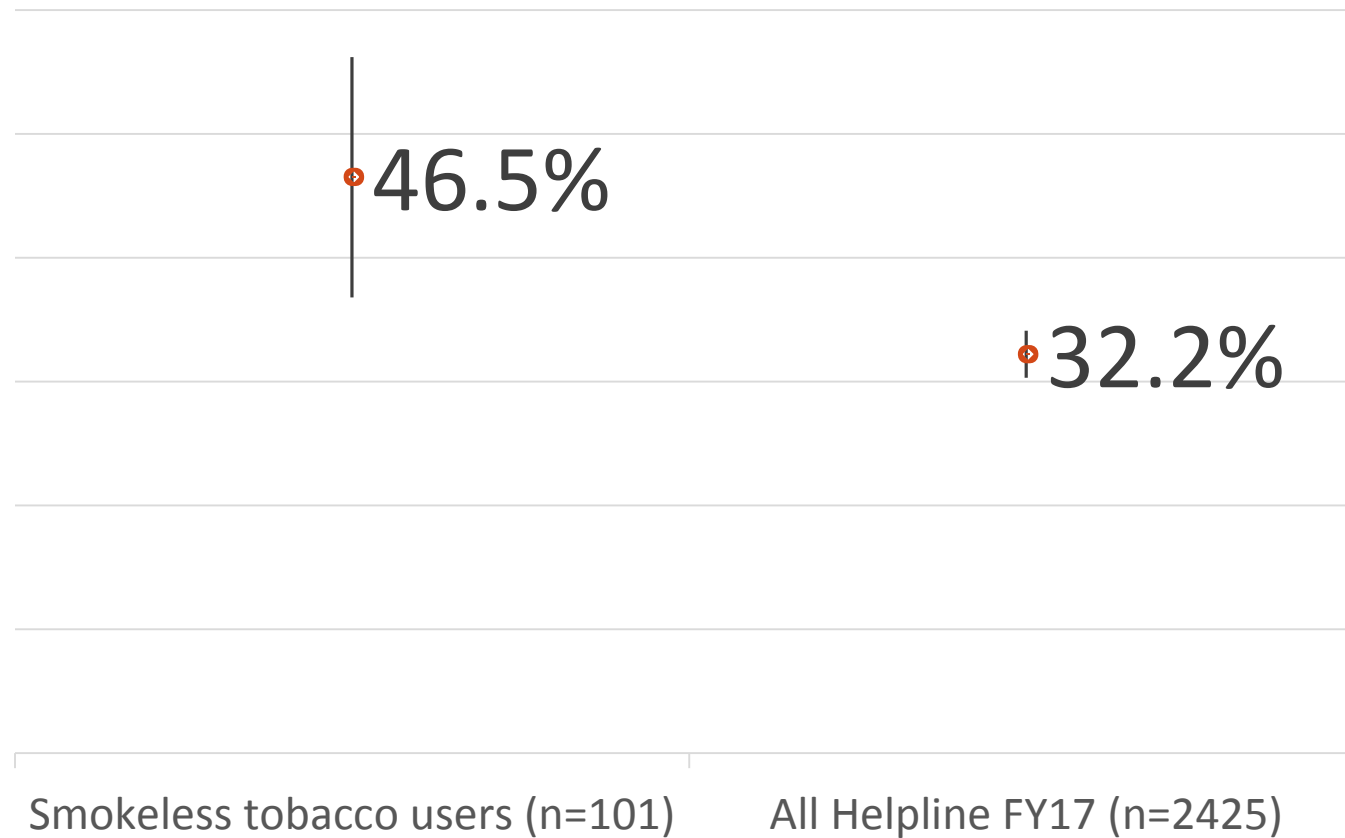
Helpline Intervention Received

n=101

Service	
Individual Services	42 (41.6%)
Multiple Call Program	35 (34.7%)
One Call Program	17 (16.8%)
Web Only Program	7 (6.9%)

NRT	
2 weeks	60 (59.4%)
4-6 weeks	25 (24.8%)
8+ weeks	16 (15.8%)

30-day point prevalence tobacco abstinence ST users and all Helpline



What contributes to success? (Odds Ratios with 95% CIs)

Age	
18-24	ref
25-34	0.16 (0.03, 0.94)
35-44	0.13 (0.02, 0.78)
45-54	0.21 (0.04, 1.21)
55-64	0.45 (0.07, 3.00)
65+	0.10 (0.01, 0.95)
NRT from the Helpline	
2 weeks	ref
4-6 weeks	1.38 (0.54, 3.54)
8+ weeks	3.30 (1.02, 10.70)

What contributes to success? (Odds Ratios with 95% CIs)

Helpline Service	
Multiple call program	Ref
Individual services	0.87 (0.36, 2.15)
One call program	1.51 (0.47, 4.88)
Web Program only	0.18 (0.02, 1.62)
Sociodemographic Factors	
White vs. non-white	1.53 (0.54, 4.37)
Urban vs. rural	0.81 (0.35, 1.85)
> High school education vs. high school or less	0.80 (0.29, 2.20)
Income \$20,000 + vs. <\$20,000	0.80 (0.33, 1.92)
Chronic disease vs. none	2.06 (0.82, 5.18)
MHSA disorder vs. none	0.68 (0.27, 1.72)

What contributes to success? (Odds Ratios with 95% CIs)

Nicotine Dependence at registration	
Light	Ref
Moderate	0.92 (0.35, 2.40)
Heavy	0.82 (0.25, 2.63)
Time to first tobacco at registration	
Within 5 minutes	Ref
6-30 minutes	0.77 (0.29, 2.05)
31-60 minutes	1.00 (0.31, 3.27)
>60 minutes	0.67 (0.19, 2.38)
ST cans/pouches at registration	
1 or fewer	Ref
2	1.87 (0.28, 12.30)
3	0.56 (0.11, 2.86)
More than 3	0.67 (0.16, 2.76)

Discussion

In this sample of male exclusive smokeless tobacco users using a Quitline for services, 46% quit using tobacco, comparing favorably to the 43% quit rate reported previously by Mushtaq et al. (2015).

Amount of NRT provided by the Helpline made a difference in success rate. Compared to those receiving 2 weeks of NRT, those receiving 8+ weeks of NRT were more than three times more likely to be abstinent at the 30-day follow-up.

Of all intrinsic factors examined, only age was significant with regard to quit success. ST users aged 18-24 years were most successful. Compared to that referent group, the odds of an ST user being tobacco free after Quitline intervention was less for those 25-34 years, those 35-44 years, and those 65+ years.

Limitations

Small sample size

Abstinence not biochemically verified

While follow-up was high (63.5%), there is potential for non-response bias

Those who completed the follow-up survey may be different from those not reporting for follow-up

Conclusion

Tobacco quitlines are an important resource for ST users wanting to quit.

Although our sample size was limited, quit rates for ST users exceeded benchmarks for quitline services.

Continued research is needed to further explore factors associated with successful outcomes.

Acknowledgements

Lindsay Boeckman, MS conducted the analyses

TSET as the primary funder for the Oklahoma Tobacco Helpline and funder for the evaluation

PDA for follow-up survey data collection

Oklahoma Tobacco Helpline service provider, Optum

Oklahoma Tobacco Helpline registrants completing the follow-up survey

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Mushtaq N, Boeckmann LM, Beebe LA. Predictors of smokeless tobacco cessation among telephone Quitline participants. [Am J Prev Med](http://www.ajpm.com). 2015 Jan;48(1 Suppl 1):S54-60. doi: 10.1016/j.amepre.2014.09.028.