

ARE MENTHOL SMOKERS USING STATE QUITLINES? FINDINGS FROM MINNESOTA



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INTRODUCTION

- Increasing the reach of evidence-based cessation services is a long-standing public health priority.
- Reach ratios** can be used to gauge whether quitline services are reaching smoker subgroups.^a
- Reach ratios are a relative comparison of the proportion of a subgroup in a quitline to the proportion of the same subgroup in the larger population of tobacco users.
- Little research has examined **whether quitline services are reaching menthol smokers**, who may have increased difficulty quitting relative to non-menthol smokers.
- The purpose of this study was to understand whether quitline services are reaching menthol smokers.

METHODS

Sample:

- QUITPLAN® Services smokers who enrolled between May and October 2017 (n=5235)

Measures:

- Usual cigarette type: menthol vs. non-menthol
- Demographics, smoking-related and utilization characteristics

Analyses:

- Reach ratio: Service enrollees (numerator); 2014 Minnesota Adult Tobacco Survey (denominator); confidence intervals were estimated using the Katz log method.
- Data were analyzed using chi-square tests and t-tests; Bonferroni correction for multiple tests.

PROGRAM DESCRIPTION



Individual QUITPLAN® Services

- ✓ Two-week NRT starter kit
- ✓ Email program
- ✓ Text messaging
- ✓ Printed quit guide



QUITPLAN® Helpline

- ✓ Phone counseling plus NRT
- ✓ Integrated email program
- ✓ Integrated text messaging
- ✓ Printed quit guide

RESULTS

$$\text{Reach Ratio} = \frac{\% \text{ of Program Enrollees who Smoke Menthol}}{\% \text{ of Smokers in MN who Use Menthol}} = \frac{30.8\%}{25.1\%} = 1.23$$

(95% CI: 1.11, 1.36)

Reach Ratio = 1 subgroup is proportionately represented in cessation program population	
Reach Ratio < 1 subgroup is under-represented in cessation program population	Reach Ratio > 1 subgroup is over-represented in cessation program population

Characteristics of Program Enrollees

- Menthol smokers** were **more likely** than non-menthol smokers to (p<.005):
 - Be **younger** (average age 40.6 vs 45.4 years)
 - Be **female** (64.1% vs 57.7%)
 - Be **African American** (21.0% vs 2.2%)
 - Live in the **Twin Cities metro area** (62.7% vs 51.5%)
 - Live in neighborhoods with **lower median home value** (\$171K vs \$178K)
 - Smoke **fewer cigarettes** per day (15.4 vs 17.0)

Utilization Characteristics

- Menthol smokers were **more likely** than non-menthol smokers to enroll in the **text messaging program** (28.7% vs 25.4%; p=.013)
- No significant differences** were found between menthol smokers and non-menthol smokers on:
 - Service type (Individual Services, Helpline)
 - Registration mode (online, phone)
 - Program utilization (number of counseling calls, provision of NRT or the quit guide, enrollment in the email program)

CONCLUSIONS

- The reach ratio >1 for menthol smokers indicates that **menthol smokers are over-represented, indicating that** Minnesota's quitline is reaching menthol smokers.
- Consistent with previous research, menthol smokers were more likely to be younger, female, African American, and live in an urban area than non-menthol smokers.
- Few significant differences were found in how menthol smokers used cessation services compared to non-menthol smokers.

Implications

- State quitlines should consider assessing menthol use at intake in order to monitor reach of services and promotional strategies directed at menthol smokers.
- Future studies combining reach ratios and quit outcomes can help states adapt services to address the unique challenges presented by menthol use and help menthol smokers quit.

Reference

^a Campbell, H. S., Baskerville, N. B., Hayward, L. M., Brown, K. S., & Ossip, D. J. (2013). The Reach Ratio—A New Indicator for Comparing Quitline Reach into Smoking Subgroups. *Nicotine & Tobacco Research*, 16(4), 491-495

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