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Prevention in Focus Webinar Series

Welcome!
We will begin shortly.

Prevention in Focus Webinar Series

Unlocking Solutions: Menthol Smoking Cessation Strategies



Monica Webb Hooper, Ph.D.

Presenter | Deputy Director, National Institute on Minority Health and Health Disparities (NIMHD)



Denise Stredrick, Ph.D.

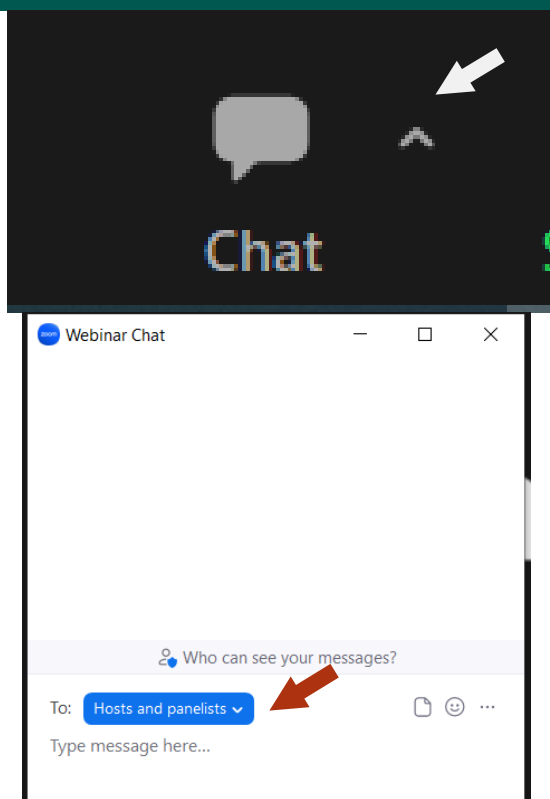
Speaker Introduction | Health Scientist Administrator, NIH Office of Disease Prevention (ODP)



Kay L. Wanke, Ph.D., M.P.H.

Q & A Moderator | Deputy Director, Tobacco Regulatory Science Program (TRSP) | NIH Office of Disease Prevention (ODP)

Prevention in Focus Webinar Series



Upcoming Q&A Session

**Please send us your questions
via the **Chat pod** directed to
Hosts and Panelists**

Please use the Chat pod to request technical assistance

Denise Stredrick, Ph.D.

Speaker Introduction | Health Scientist Administrator,
NIH Office of Disease Prevention (ODP)



Prevention in Focus Webinar Series

ADVANCE: Advancing Prevention Research for Health Equity

Develop and test (1) new interventions and (2) new strategies to disseminate existing interventions that address the leading risk factors for death and disability in populations that experience health disparities.



Prevention in Focus Webinar Series

Cutting Weighted Ties: Running to a Better Future

Author: Alexis Gumapas



“In the painting, a girl is being out free from ties with drugs. The scissors in the painting symbolize prevention. They free the girl from being weighed down by drugs, allowing her to run towards safer, healthier choices. Prevention can stop people from getting sick or using harmful substances. It can cut off ties to negative and dangerous decisions before they are considered. Prevention also gives hope for a better future which is conveyed by the bright colors the girl is running towards.”

Teens 13-17 years old

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Choose to Bloom

Artist: Leah Badeau



“My artwork shows prevention against vaping and or smoking. It shows lungs, on the healthy side blooming flowers are shown indicating a health lung while on the opposite side the flowers are dying, showing what slowly happens to your lungs due to the affects of vaping.”

Teens 13-17 years old

Prevention in Focus Webinar Series

Clean Air is Healing for All

Artist: Kaylee Mangum



“My piece contrasts two skeletons: one, smoking a cigarette in a polluted, desolate environment, with black and diseased lungs; the other, in a clean, vibrant scene filled with life, planting flowers and with visibly healthy, pink lungs. It symbolizes the impact of clean air on health and the environment, urging collective action — both through community intervention and individual choices — to promote a healthier future for all, and to prevent multiple diseases, such as lung cancer and COPD.”

Teens 13-17 years old

Monica Webb Hooper, Ph.D.

Presenter | Deputy Director, National
Institute on Minority Health and Health
Disparities (NIMHD)



Prevention in Focus Webinar Series



Unlocking Solutions: Menthol Smoking Cessation Strategies

Monica Webb Hooper, Ph.D.

**Deputy Director
National Institute on Minority Health
and Health Disparities**



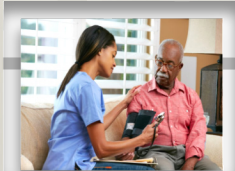
Disclaimer

**The views expressed during this presentation
do not necessarily state or reflect those of NIH
or the U.S. Government.**

Just an FYI.

Tobacco and Health Impacts

Stroke
Cancer
Heart
Disease
Diabetes
Hypertension



Main Components of Nicotine Dependence

Physical

Behavioral

Psychological

What is Menthol & Why is it in Commercial Tobacco Products?

- **Cooling Sensation and Reduced Harshness¹**
- **Enhanced Nicotine Absorption¹**
- **Marketing and Consumer Appeal**
- **Perceived Health Benefits¹**
- **No clear worsening of health vs non-menthol cigarettes²**

Photo by [Andreas Haslinger](#) on [Unsplash](#)

¹Anderson, S. J. (2011). Tob Control.

²Pletcher et al. (2006). Arch Intern Med.

Racial Disparities in Tobacco Cessation



Source: Holford et al. (2016). Comparison of Smoking History Patterns Among African American and White Cohorts in the United States Born 1890 to 1990. N&TR, 18(Spppl 1).



Percentage of adults aged > 18 years who reported combustible tobacco product use, 2021 US

Race or Ethnicity	%	Quit Ratio
White	15.9%	67.9 (66.6–69.2)
Black/African American	16.4%	53.7 (49.5-57.9)
Asian	7.0%	70.0 (63.6-76.2)
American Indian/Alaska Native	29.3%*	
Hispanic/Latino	9.9%	67.7 (64.4-70.8)
Other Groups	18.0%	61.5 (53.5-69.2)

*Tobacco Product Use Among Adults – United States, 2020, MMWR-Mar 18, 2022; 71(11);397-405

Source: Tobacco Product Use Among Adults – United States, 2021, MMWR-May 5, 2023; 72(18);475-483

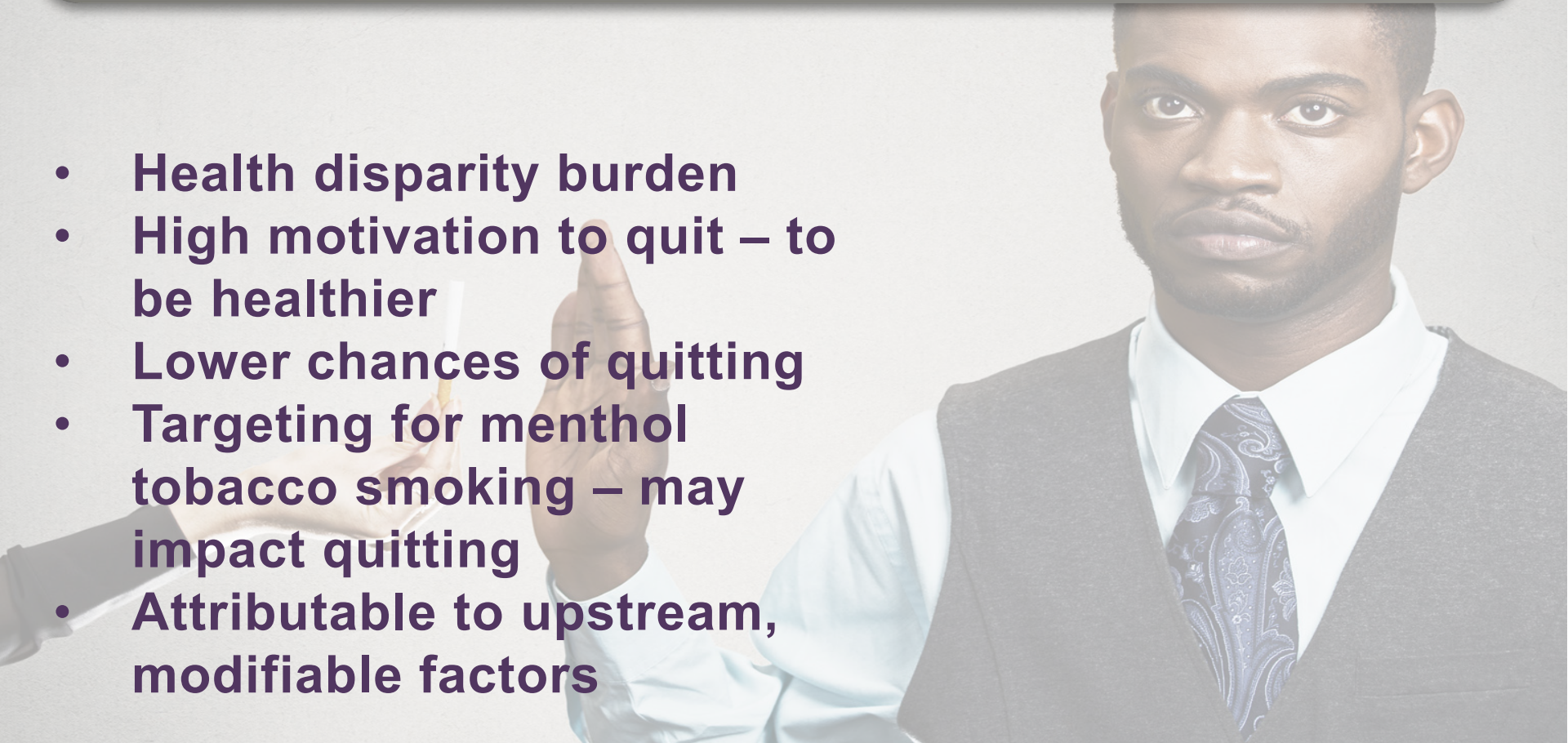
Percentage of adults who smoke: Past 30-day menthol cigarette smoking, 2020 US

Race or Ethnicity	% (95% CI)	OR (95% CI)
White	33.75 (30.76, 36.87)	Reference
Black/African American	80.92 (73.46, 86.66)	8.32 (5.15, 13.46)
Hispanic/Latino	51.26 (41.08, 61.34)	2.06 (1.40, 3.05)
Other Groups	41.42 (32.27, 51.21)	1.39 (0.94, 2.04)

Source: Goodwin et al. Nicotine Tob Res. 2023

Menthol Smoking and Black Americans

- Health disparity burden
- High motivation to quit – to be healthier
- Lower chances of quitting
- Targeting for menthol tobacco smoking – may impact quitting
- Attributable to upstream, modifiable factors



Residential Segregation

- Higher smoking prevalence
- Fewer cessation resources
- More likely to be excluded from clinical trials



**FACT:
THERE ARE MORE
CIGARETTE ADS
IN BLACK NEIGHBORHOODS**



Source: <https://www.multivu.com/players/English/7966851-truth-initiative-stop-profiling/>
<https://countertobacco.org/resources-tools/evidence-summaries/stores-near-schools/>

Does Menthol Tobacco Smoking Impact Cessation?⁽¹⁾



- Data are mixed, but more recent studies indicate yes

Does Menthol Tobacco Smoking Impact Cessation? ⁽²⁾

Conclusions

Systematic review & Meta-analyses

- Qualitative syntheses showed ***no consistent association*** trend,¹ or harder to quit menthol cigarettes²
- Meta-analyses ***found no difference*** vs. non-menthol cigarettes,^{1,3} except for ***Black/African American*** adults³
- ***No difference*** among older adults⁴

¹Kim & Curtin (2021). Subst Abuse Treat Prev Policy.

³Smith et al. (2020). Nicotine Tob Res.

²Pletcher, Webb Hooper et al. (2010). Nicotine Tob Res. ⁴Fu et al. (2008). Nicotine Tob Res.

Does Menthol Tobacco Smoking Impact Cessation? ⁽³⁾

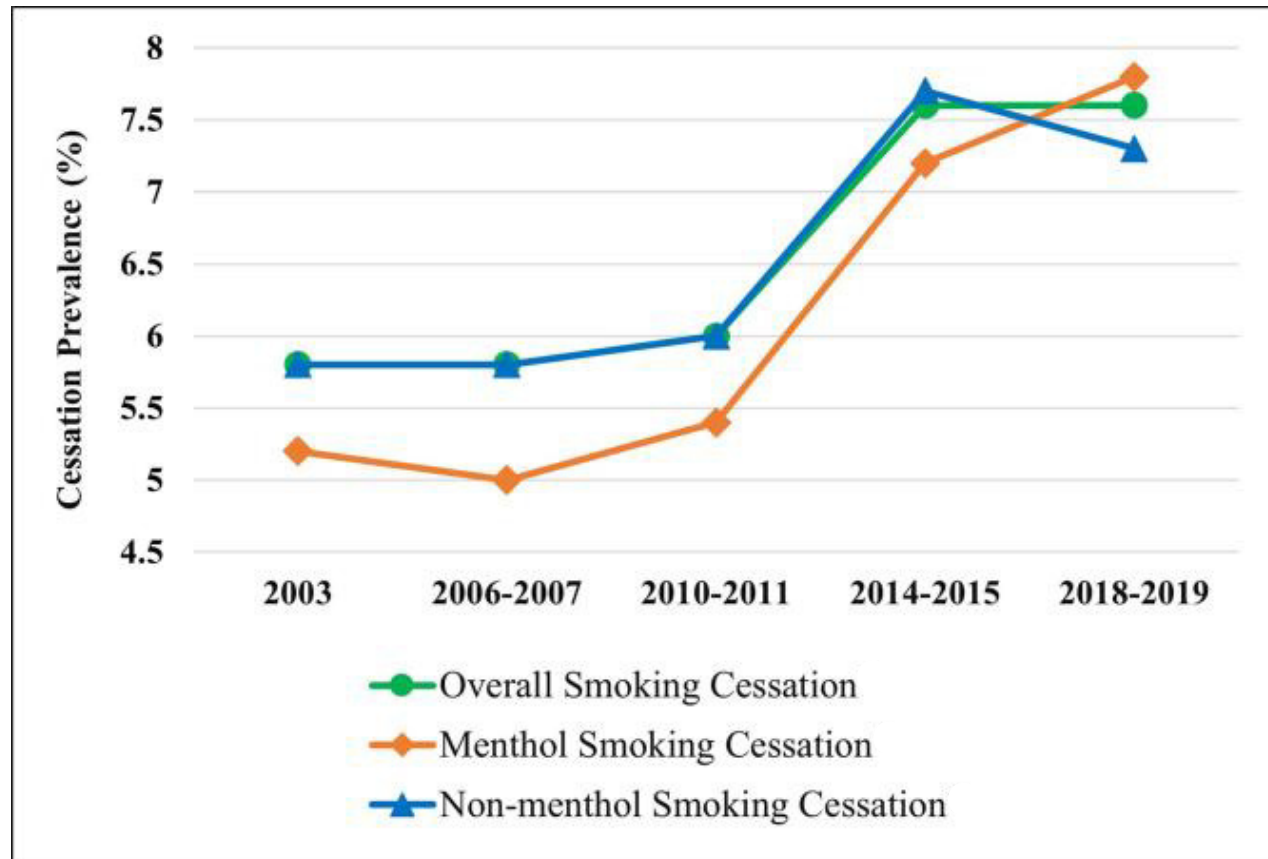
Conclusions

**2003-2019
Tobacco Use
Supplement to
the Current
Population
Survey**

- **Positive change in smoking cessation overall, over time**
- **Black/African American Adults did not experience gains in cessation overall, or with menthol smoking**

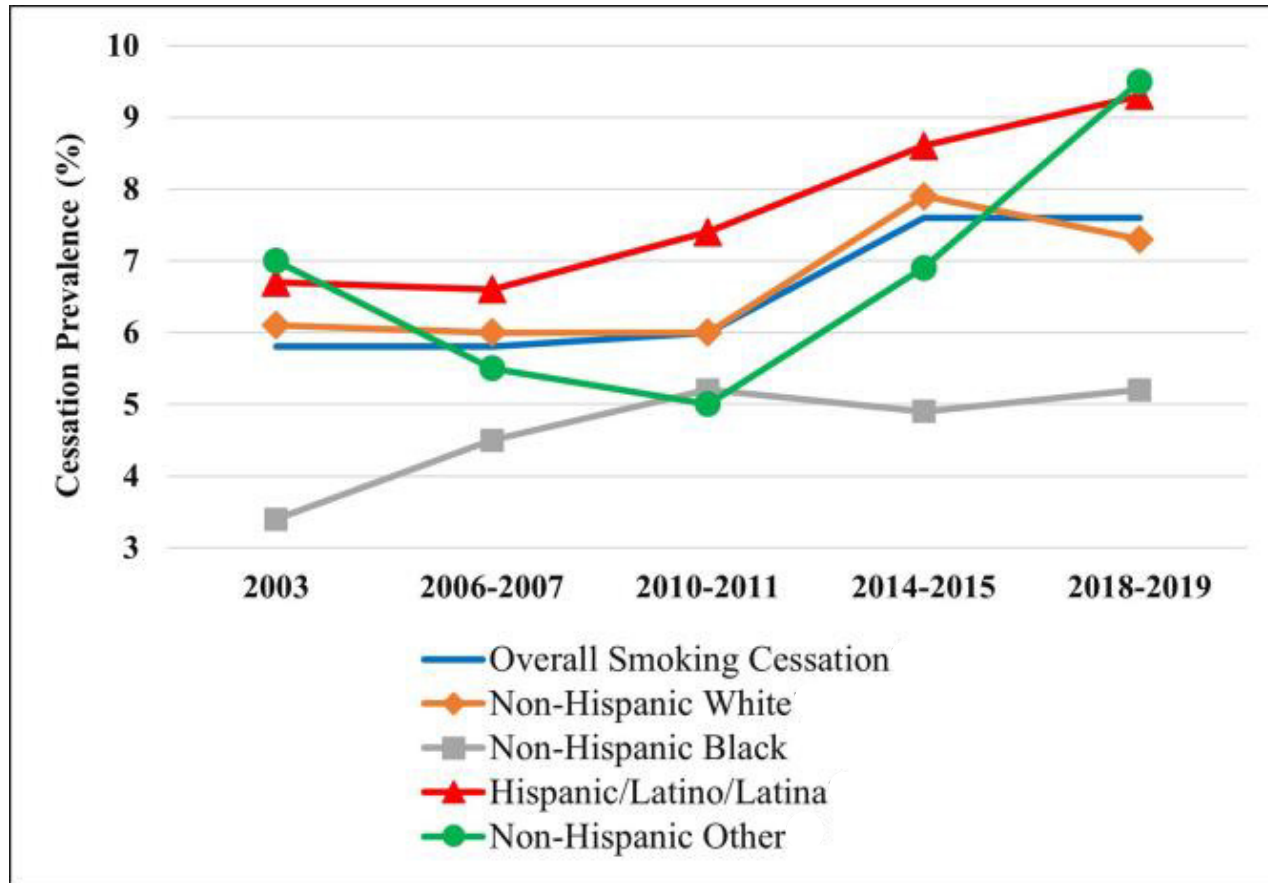
Source: Jones et al. (2023). Prev Med Rep.

Cigarette smoking cessation prevalence by overall smoking cessation, menthol smoking cessation, and non-menthol smoking cessation. Tobacco Use Supplement to the Current Population Survey, 2003–2019



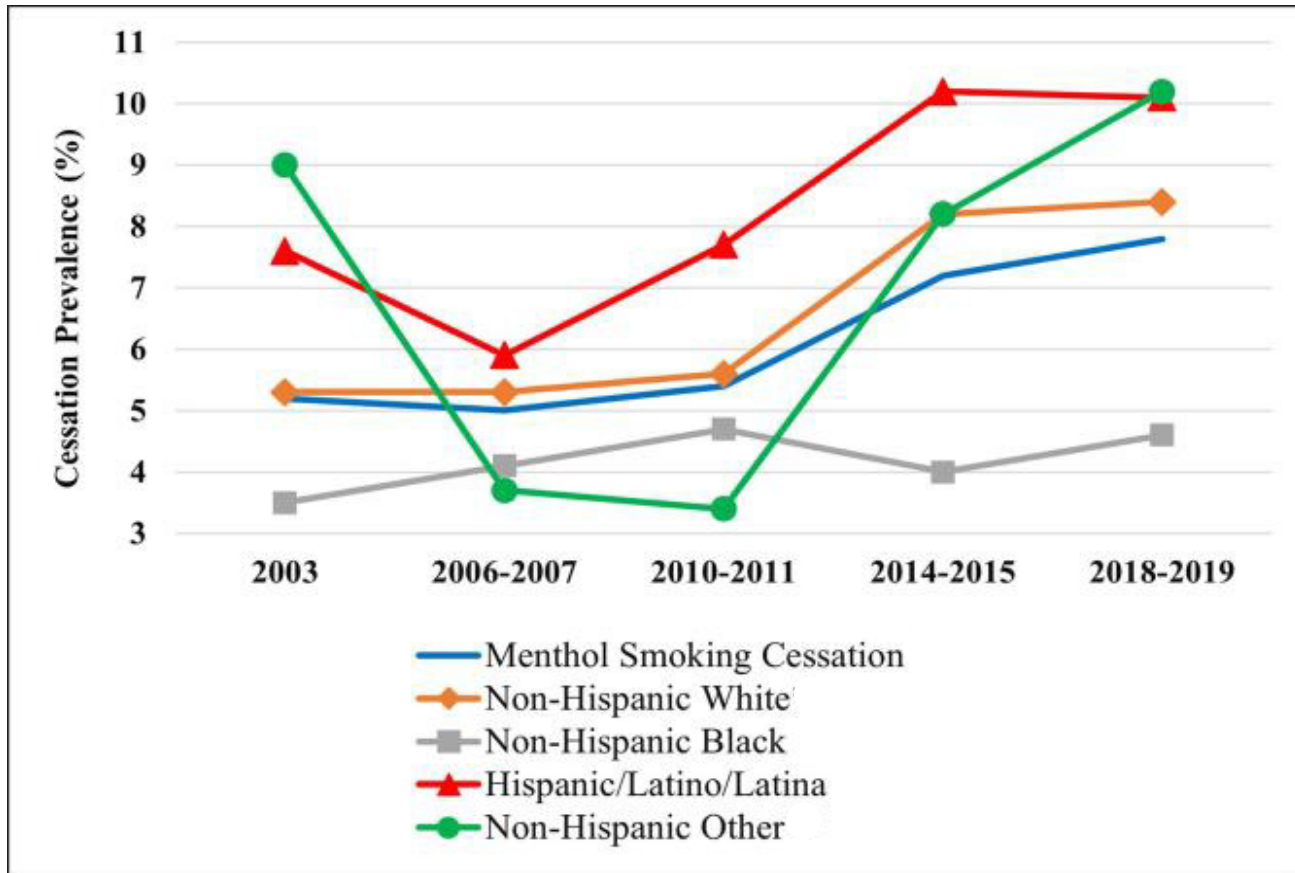
Source: Jones et al. (2023). Prev Med Rep.

Overall smoking cessation and stratified by race/ethnicity. Tobacco Use Supplement to the Current Population Survey, 2003–2019



Source: Jones et al. (2023). Prev Med Rep.

Menthol smoking cessation and stratified by race/ethnicity. Tobacco Use Supplement to the Current Population Survey, 2003–2019



Source: Jones et al. (2023). Prev Med Rep.

Does Menthol Tobacco Smoking Impact Cessation? ⁽⁴⁾

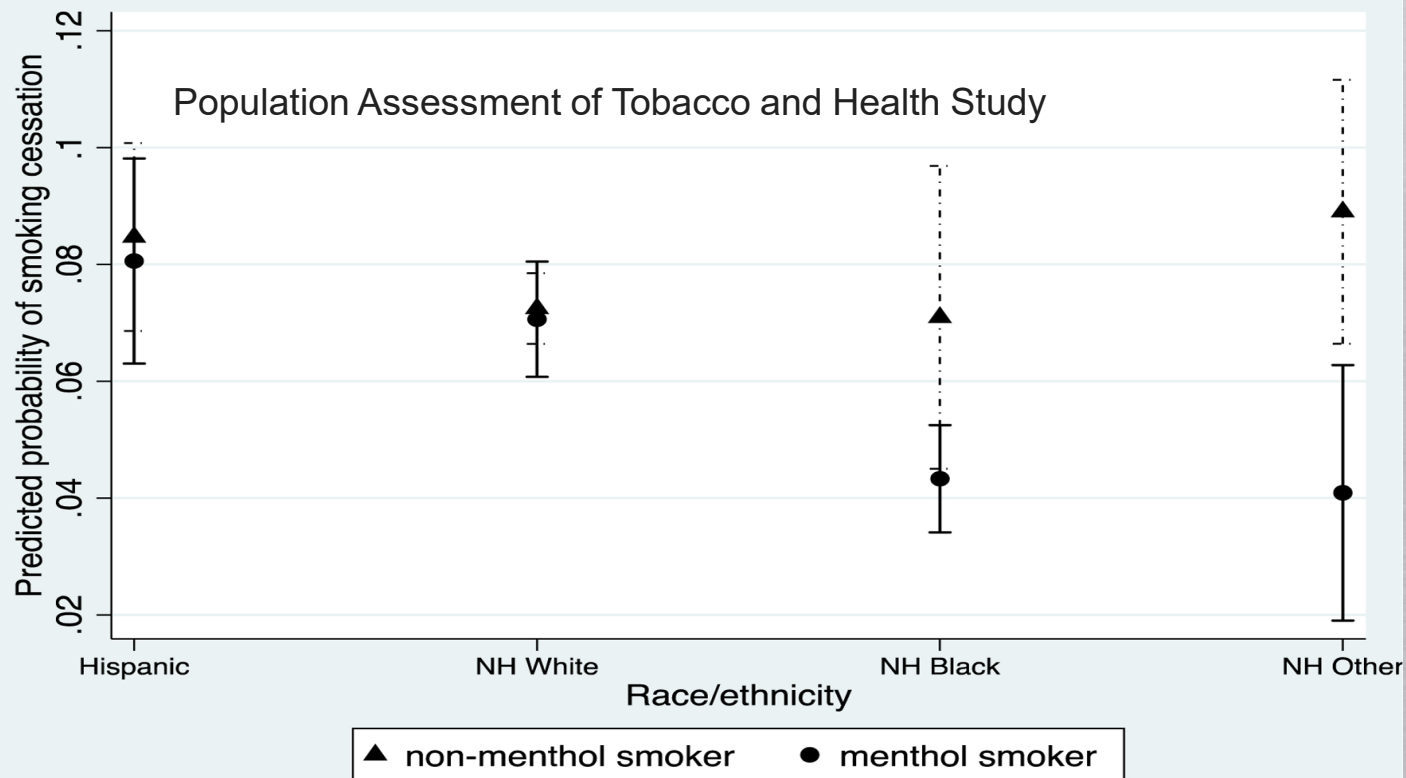
Conclusions

**2013-2018
Population
Assessment
of Tobacco
and Health
Study**

- **Menthol smoking less likely to quit vs. non-menthol smoking**
- **Black/African American and White daily menthol users less likely to have quit**

Source: Mills et al. (2021). Nicotine Tob Res.

Does Menthol Tobacco Smoking Impact Cessation? ⁽⁵⁾



Source: Cook et al. (2021). Prev Med.

Does Menthol Tobacco Smoking Impact Cessation – In the Treatment Context?

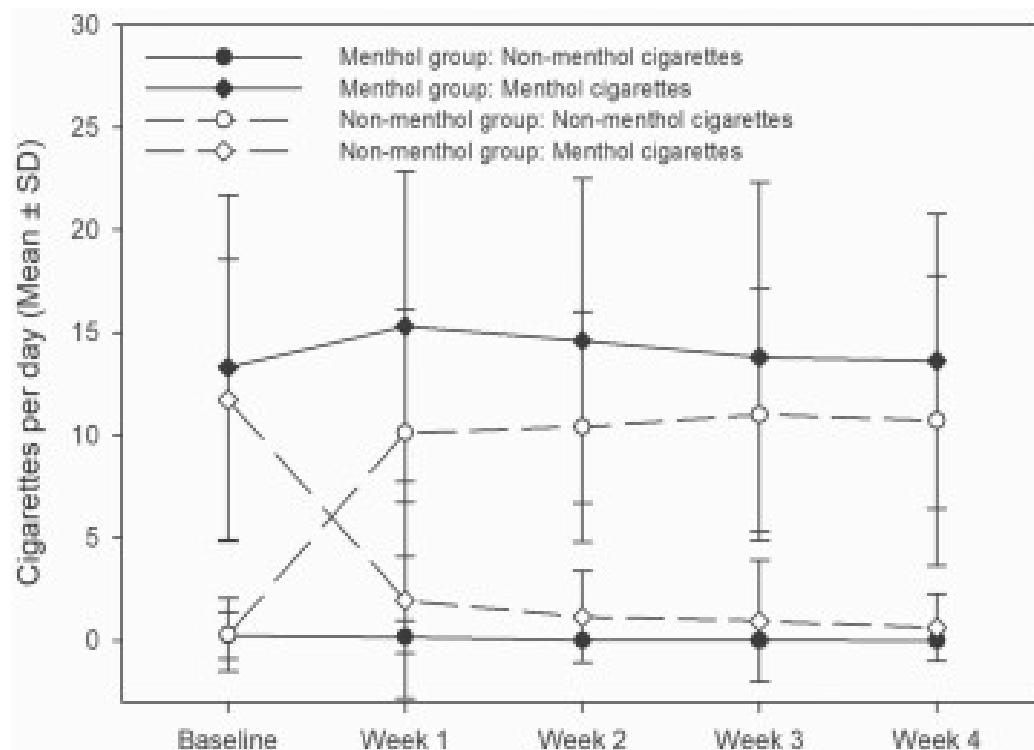
- **Comparative effectiveness trial (N = 1,504)**
- **Randomized to one of 6 medications, placebo-controlled**
- **Menthol smoking less likely to quit vs. non-menthol**
 - **31% vs. 38%**
- **Among menthol users, Black/African American women less likely to quit vs. White women**

Source: Smith et al. (2014). Addiction.

Does Switching to Non-Menthol Tobacco Smoking Impact Behavior?

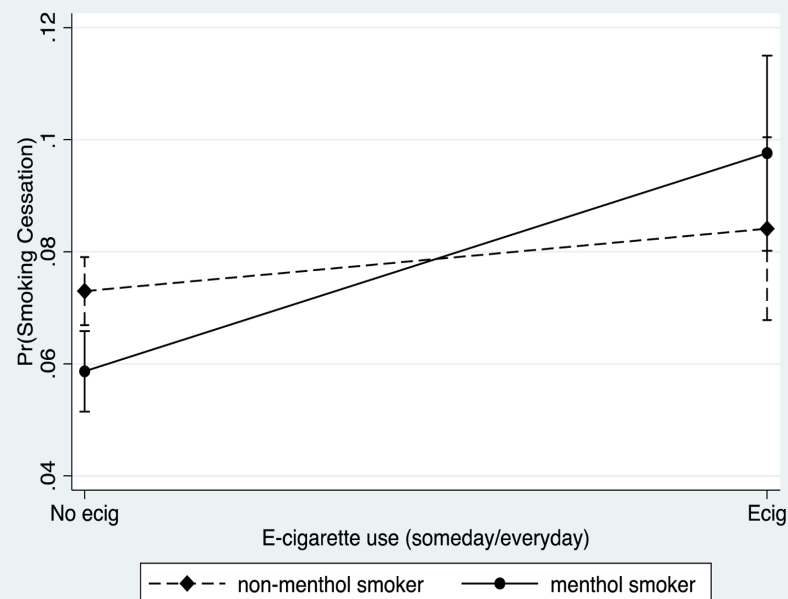
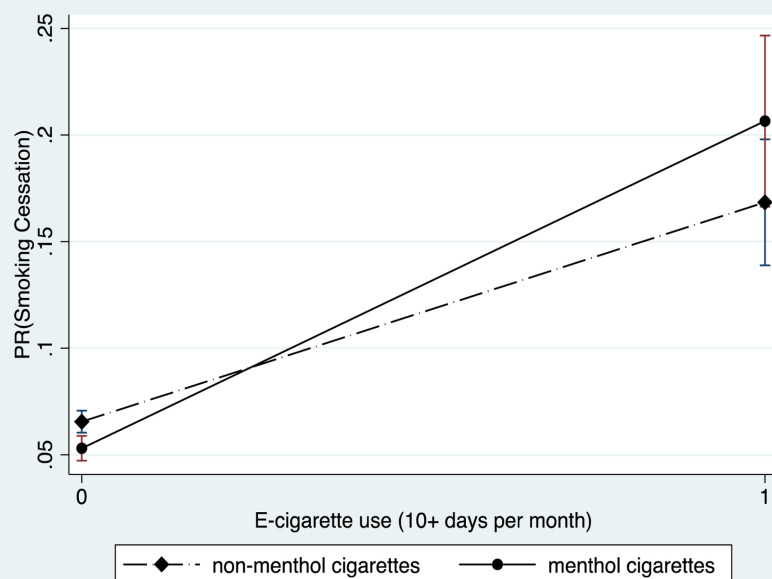
Conclusions

- **Decreased daily intensity, withdrawal severity**
- **No effects on CO, cotinine, support for menthol ban**
- **Switching to non-menthol not more hazardous, may be beneficial**



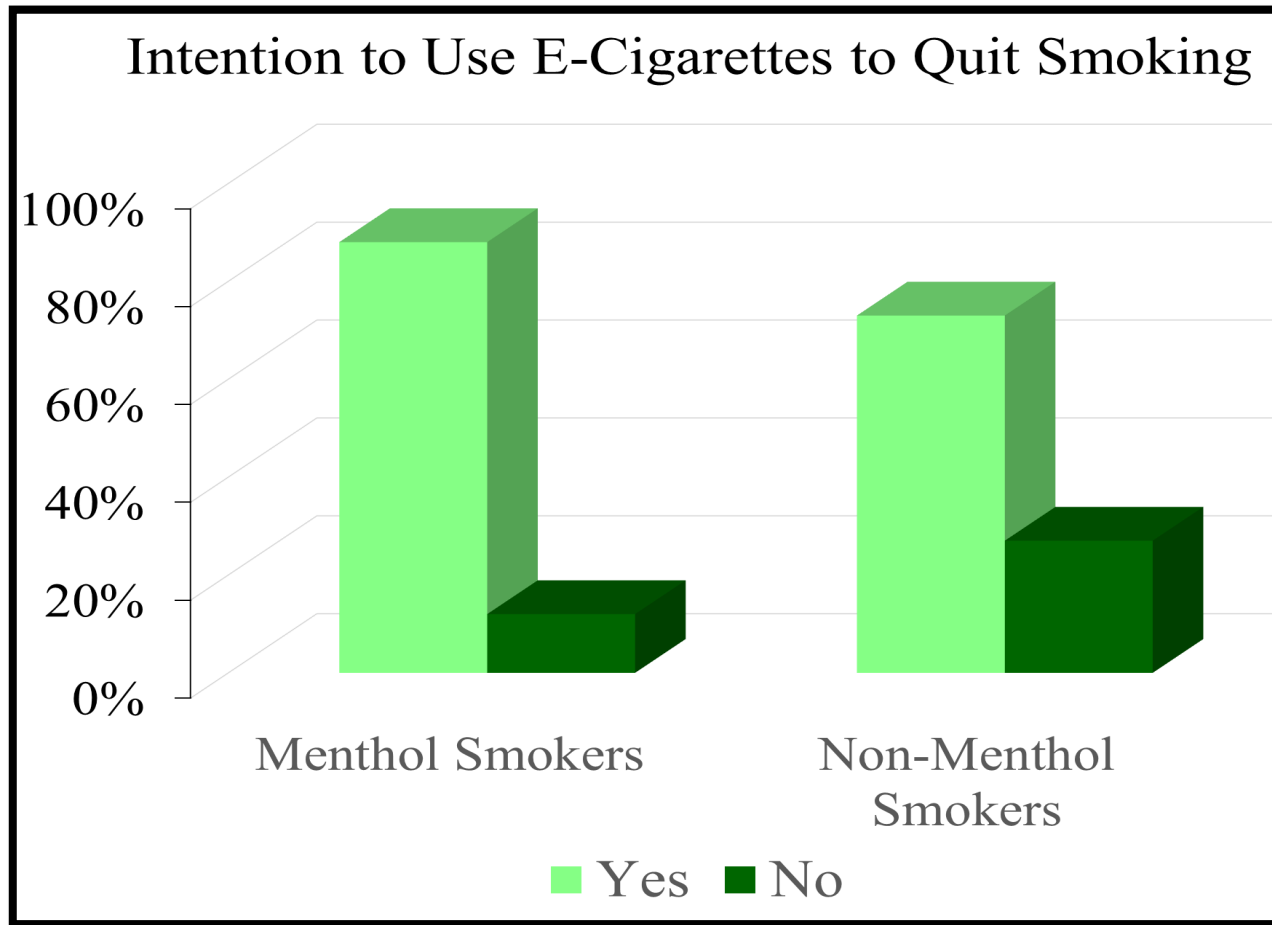
Source: Kotlyar et al. (2021). Nicotine Tob Res.

Does E-Cigarette Use Impact Menthol Tobacco Smoking Cessation?



Source: Cook et al. (2021). Prev Med.

Among respondents who had Ever Used E-Cigarettes

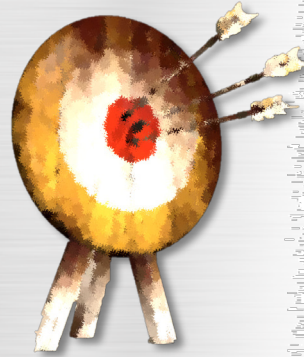


Source: Webb Hooper M, Smiley SL. Comparison of E-Cigarette Use among Menthol and Non-Menthol Smokers: Findings from a Community Based Sample. *Ethn Dis*. 2018;28(3):153-160. Published 2018 Jul 12. doi:10.18865/ed.28.3.153

Unlocking Solutions: Menthol Smoking Cessation Strategies



- What should we be doing differently to reach those most in need?



Types of Health Behavior Change Interventions

MAJOR CATEGORIES

- Standard
- Tailored
- Targeted



CULTURALLY SPECIFIC

Culturally sensitive
Culturally tailored
Culturally appropriate
Culturally competent
Culturally targeted
Culturally informed

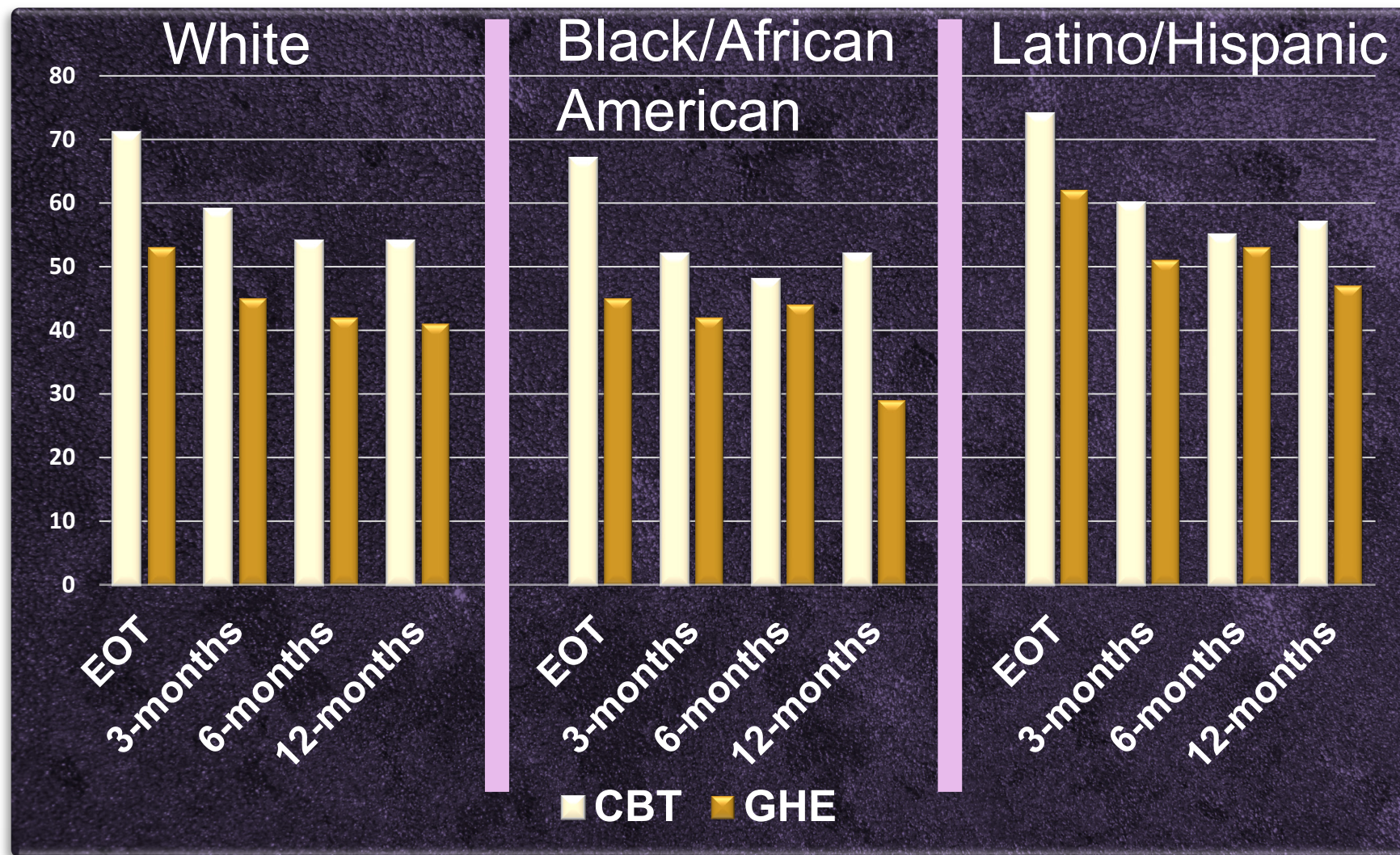




Can standard cognitive-behavioral therapy (CBT) intervention reduce racial disparities in tobacco cessation?

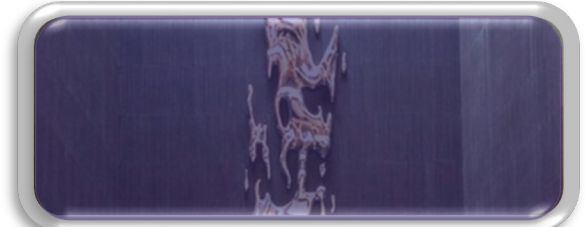
Source: Webb Hooper, M., Lee, D. J., Simmons, V. N., Brandon, K. O., Antoni, M. H., Asfar, T., Koru-Sengul, T., & Brandon, T. H. (2024). *Psychology of Addictive Behaviors*.

Biochemically-Confirmed Abstinence: Stratified



Developing Community Responsive Behavior Change Interventions

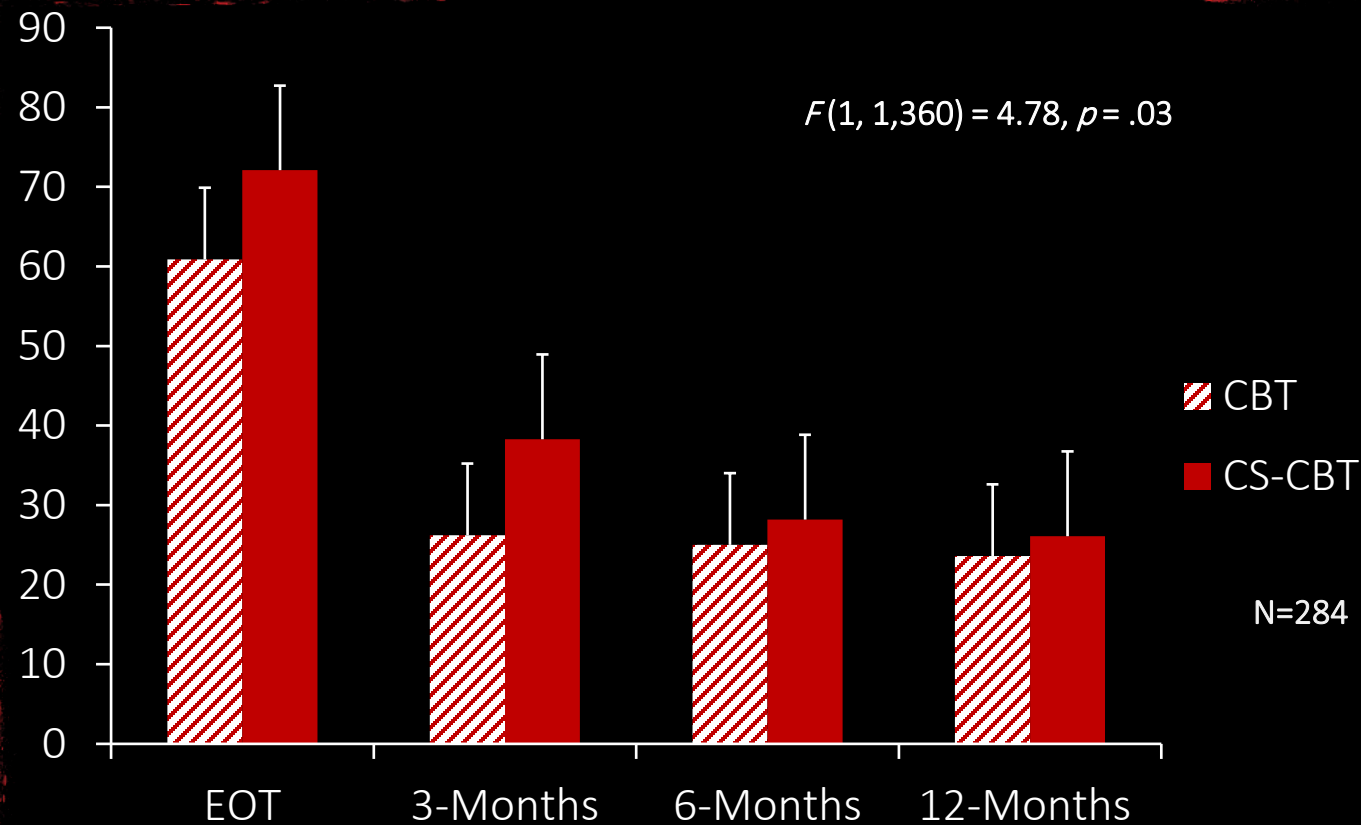
1. Problem identification & needs assessment
2. Conduct formative research
3. Apply culturally appropriate theoretical model(s)
4. Develop the behavior change intervention
5. Pilot test the intervention protocol
6. Conduct a randomized controlled trial (RCT)
7. Effectiveness research and initial dissemination



Source: Schüz, B., & Webb Hooper, M. (2020). *Addressing underserved populations and disparities in health behavior change*. In *The Handbook of Behavior Change*. Eds. M. S. Hagger., L. D. Cameron, K. Hamilton, N. Hankonen, T. Lintunen. Cambridge University Press.

	CBT	Culturally Specific CBT
Orientation	- Overview - Informed consent, baseline measures - Biochemical verification Topics: health effects, goal setting	- Same as in the CBT condition - Race-matched clinicians (RMC) Topics: Race and smoking, history of research distrust, concerns about nicotine replacement
Session 1	- Review quit plan Topics: Reasons for quitting, nicotine addiction, coping response training model, smoking, motivation, TNP	- Standard CBT Topics: Meaning of being African American, tobacco and African Americans, MENTHOL
Session 2	Topics: Benefits of quitting, coping	- Standard CBT Topics: Spirituality and religion in the African American community
Session 3	Topics: Stress management, alcohol and smoking, high cost of smoking - Perceived benefits of quitting	- Standard CBT Topics: Stressors unique to African Americans, discrimination and racism, co-morbid addiction, little cigars and blunt use
Session 4	- Cognitive restructuring Topics: Negative affect and smoking, decision making	- Standard CBT Topics: Traditional African American values, buddy system
Session 5	- Review personal high-risk situations Topics: Relapse prevention, responding to lapses	- Standard CBT Topics: Mood and depression among African Americans - Deep breathing exercises
Session 6	- Review quit plan progress - Individual high-risk situations Topics: Noted benefits of quitting, weight and smoking cessation, minimizing weight gain, relapse prevention	- Standard CBT Topics: Weight and African Americans, smoking and weight concerns (super-gainers), minimizing weight gain (physical activity with limited resources, healthy food choices within soul food diet, recipes)
Session 7	- Planning for group termination Topics: A new lifestyle, social support	- Standard CBT Topics: Life in your neighborhood, environmental influences, gaining freedom from smoking
Session 8	Topics: Reflect on group experience, long-term trip-ups, review of coping response training, withdrawal, relapse prevention	- Standard CBT Topics: Body as a temple, resources, mobilizing the African American community against the tobacco industry

Does Cultural Specificity Work? **Yes**



Biochemically Verified 7-day ppa

Source: Webb Hooper, M., Antoni, M. H., Dietz, N. A., Resnicow, K., & Okuyemi, K. S. (2017). *Nicotine & Tobacco Research*, 19(3), 333-341. doi:10.1093/ntr/ntw181



PATHWAYS to FREEDOM

Leading the Way to A Smoke Free Community

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CHAPTERS

- The High Cost We Pay
- Gaining Freedom from Smoking: Your Guide to Quitting
- Never Quit Quitting
- Community Initiatives for Tobacco-Free Neighborhoods
- Play All
- How to Use This DVD
- Frequently Asked Questions

Pathways to Freedom – Clips (1)



Dangers of Menthol (Video 1)

<https://www.youtube.com/watch?v=Ut5yRoJ5tKo>

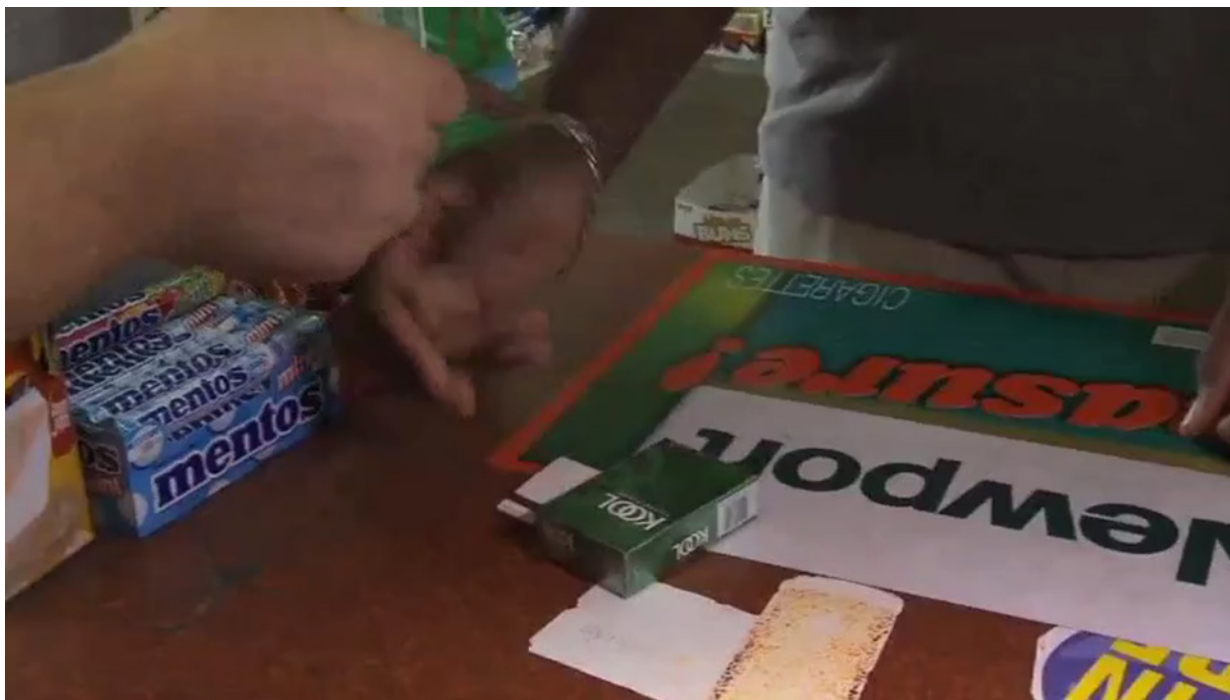
Pathways to Freedom – Clips (2)



Menthol Hazards (Video 3)

<https://www.youtube.com/watch?v=Ut5yRoJ5tKo>

Pathways to Freedom – Clips (3)



History of Menthol (Video 2)

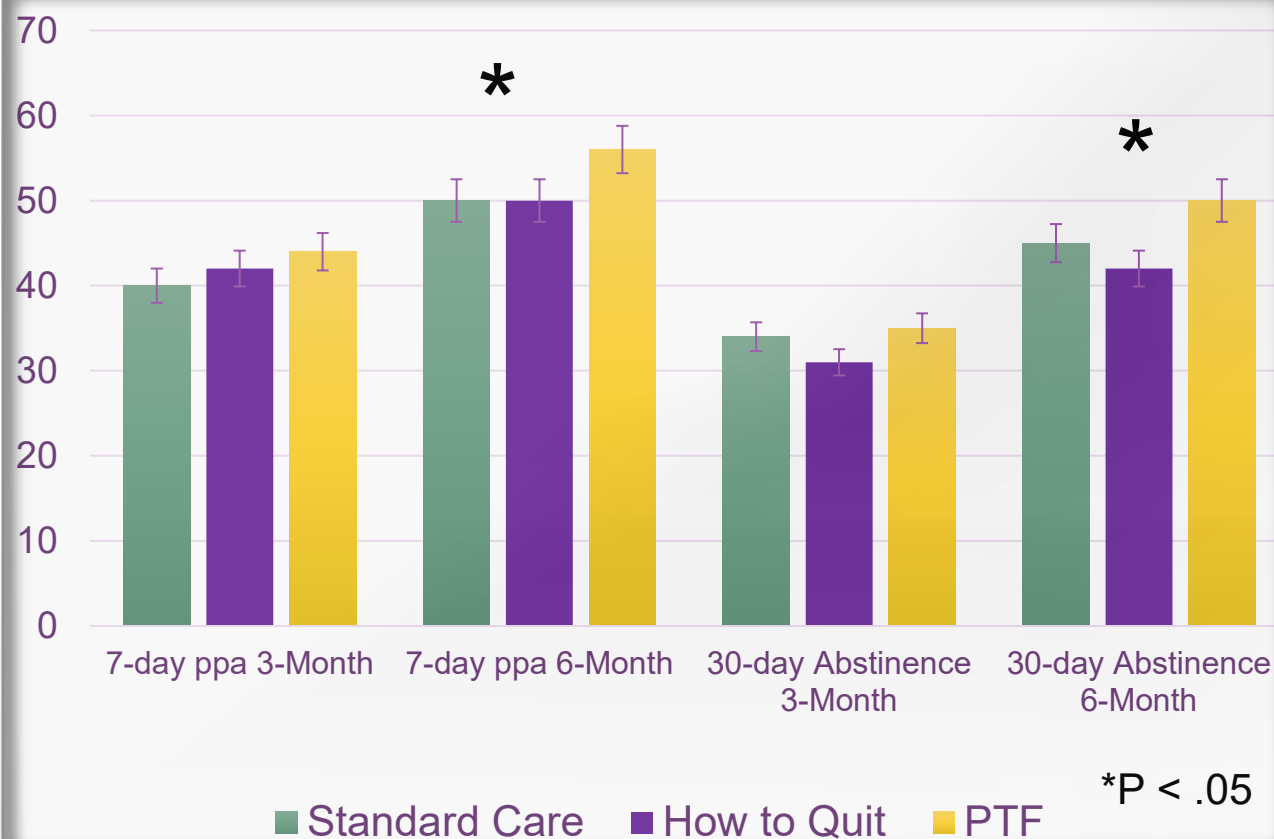
<https://www.youtube.com/watch?v=Ut5yRoJ5tKo>

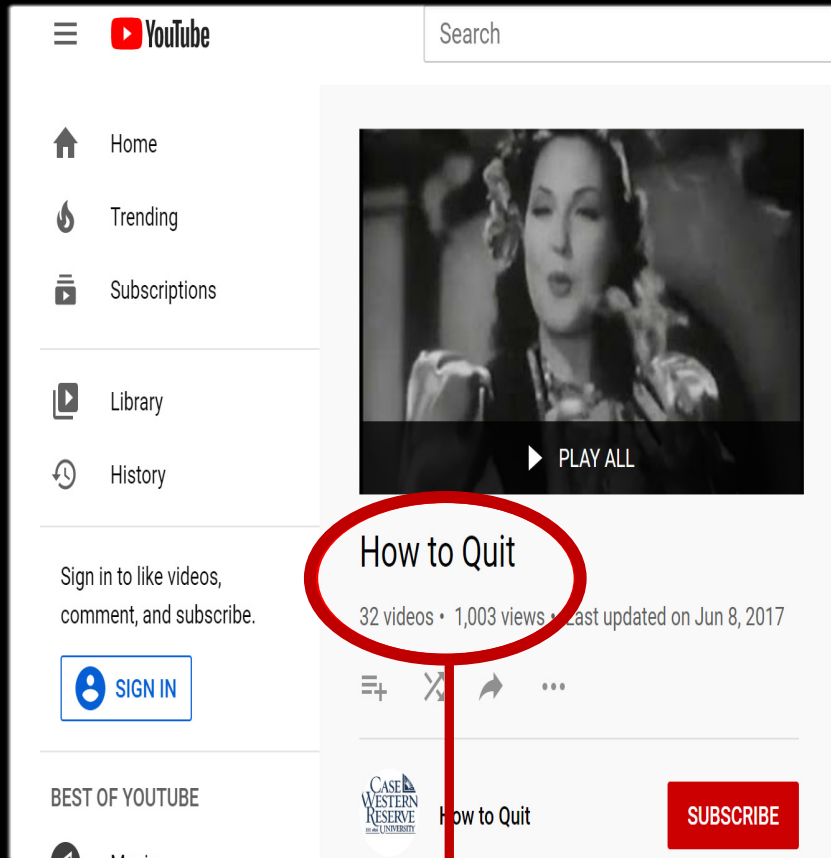


Test the effectiveness of a culturally specific intervention as a component of tobacco quitline care

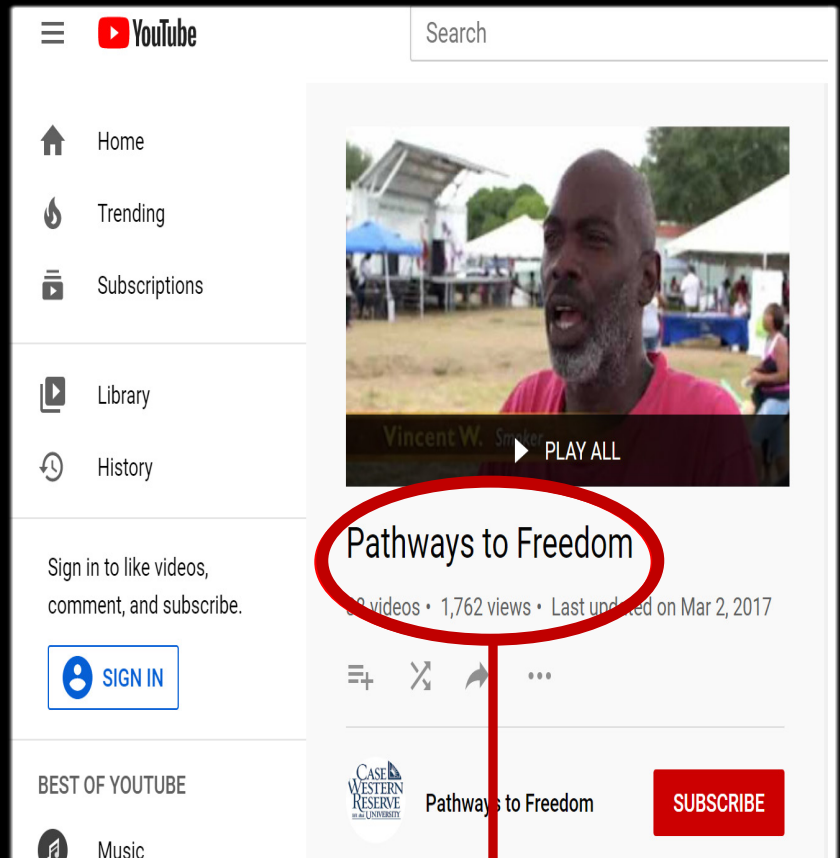
Source: Webb Hooper, M., Carpenter, K. M., Salmon, E. E., & Resnicow, K. (2023). Enhancing Tobacco Quitline Outcomes for African American Adults: An RCT of a Culturally Specific Intervention. *American journal of preventive medicine*, 65(6), 964–972.

Self-Reported Abstinence by Condition



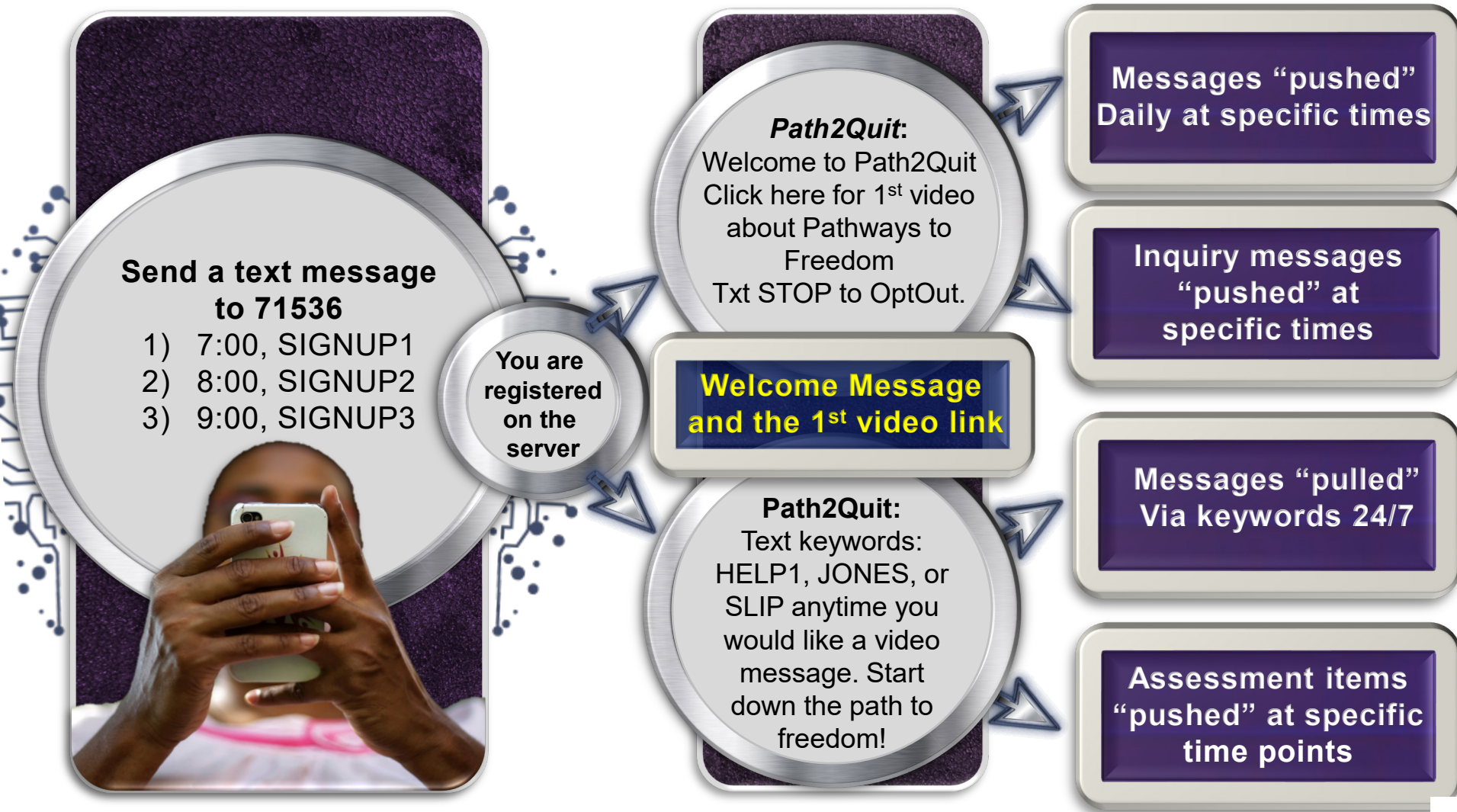


1,003 Views



1,762 Views

Culturally Specific Video-Text Program



Source: **Webb Hooper, M.**, Miller, D. B., Saldivar, E., Mitchell, C., Johnson, L., Burns, M., & Huang, M. C. (2021). Randomized controlled trial testing a video-text tobacco cessation intervention among economically disadvantaged African American adults. *Psychology of addictive behaviors : Journal of the Society of Psychologists in Addictive Behaviors*, 35(7), 769–777.

<https://doi.org/10.1037/adb0000691>

Logistic Regressions of Intervention Condition on Smoking Abstinence at Follow-Up (N = 119)

	Quit Attempt		7-Day PPA		CO-Verified PPA	
	AOR	(95% CI)	AOR	(95% CI)	AOR	(95% CI)

Logistic Regression Models

Age	1.02	(0.98-1.06)	1.04	(0.99-1.08)	1.02	(0.98-1.06)
Intervention Condition						
SmokefreeTXT	Reference		Reference		Reference	
Path2Quit	2.54	(0.88-7.33)	2.49	(0.92-6.76)	3.61	(1.39-9.36)

Note: ppa=point prevalence abstinence, AOR= Adjusted Odds Ratio, CI= Confidence Interval

Pathways to Freedom: Leading the Way to a Smoke-Free Community – National Dissemination (1)

Connect with your personal coach today. [Click to chat](#), call **1-800-QUIT-NOW (784-8669)**, or [Sign up to](#)

**Ohio Tobacco Program**
Quit Line: 1-800-QUIT-NOW

English OR

About the Quitline | About Quitting | Health Professionals | Enroll Now

Hello. [Sign In](#) or [Enroll today](#).

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Why Get Help? ▾

- Impact of Quitting
- Proven Strategies
- Tobacco and You ▾

Explore How to Quit With the Quitline ▾

Am I Ready? ▾

Why Quit? ▾

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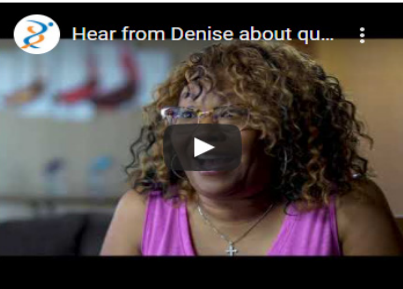
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 Pinterest

 Email

African-Americans

70% of African Americans who smoke say they want to quit. That's more than nearly every other group of people who smoke. When you decide to quit, the Quitline is here to help.

**Hear from Denise about qu...**

Pathways to Freedom

**Donna Rojas, TAS**
Dept. of Health & Human Services

Pathways to Freedom: Leading the Way to a Smoke-Free Community – National Dissemination (2)

Connect with your personal quitting coach today. **Call 1-800-QUIT-NOW** or [Enroll today](#).



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Why Get Help? ▼

- [Impact of Quitting](#)
- [Proven Strategies](#)
- [Tobacco and You](#) ▼

[Explore How to Quit With the Quitline](#) ▼

[Am I Ready?](#) ▼

[Why Quit?](#) ▼

African-Americans

There are unique health risks associated with tobacco and African-Americans.

The *Pathways to Freedom* video was designed just to help African Americans quit smoking. In the video, you will learn about the history of tobacco with the Black community, how it was tied to slavery and how it hurts the community today.



Solutions to Help Adults Who Smoke Menthol Cigarettes Quit

General Strategies

1. Behavioral counseling
2. Nicotine replacement therapy
3. Prescription medications
4. Support programs
5. Quitlines

Specific Strategies

1. Targeted/culturally specific CBT
2. Community-based and engaged interventions
3. Education and awareness campaigns
4. Policy measures
5. Increased access to resources

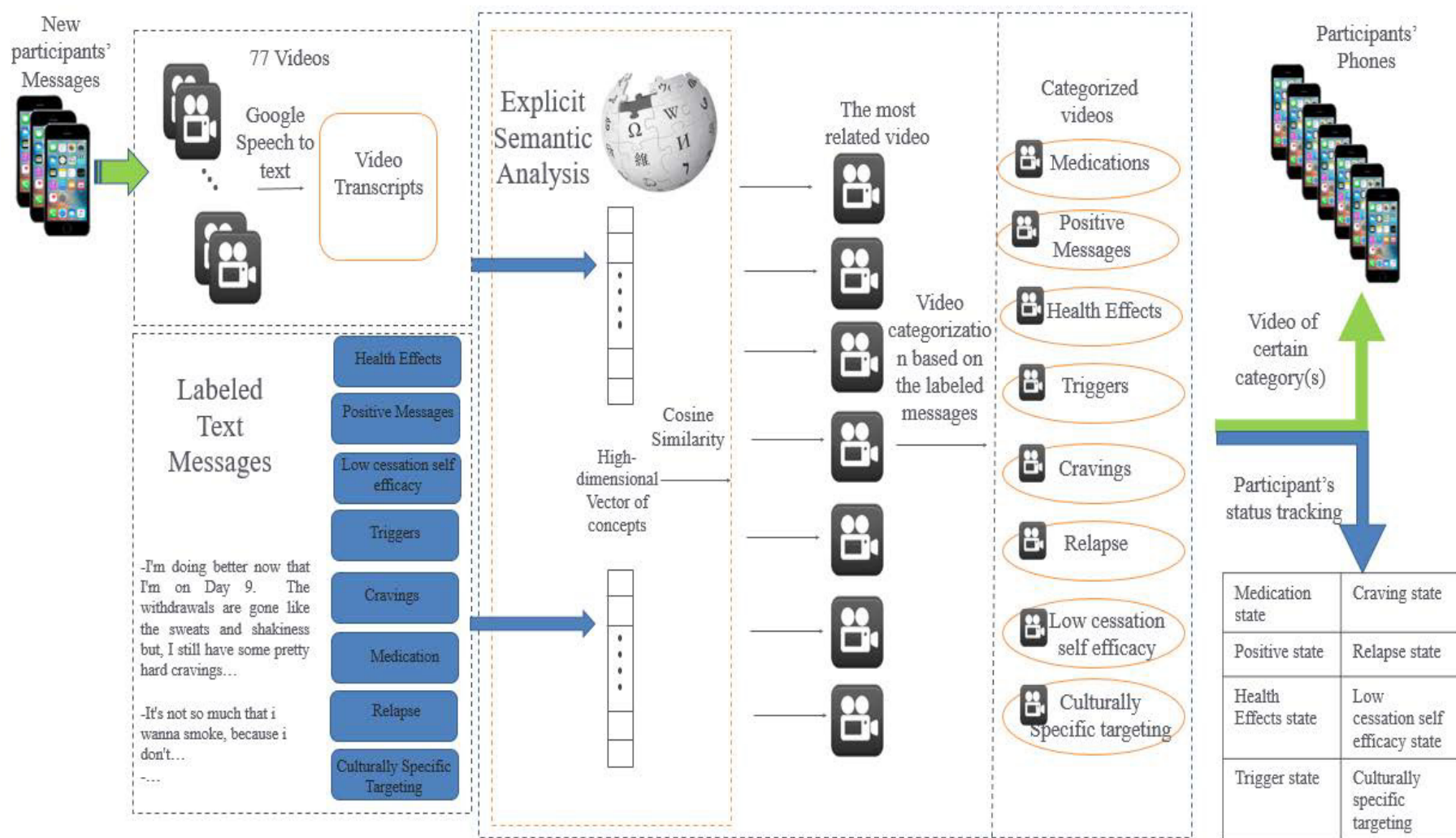
Unlocking Solutions: Menthol Smoking Cessation Strategies



- Use emerging technology
 - Wearables, AI/ML

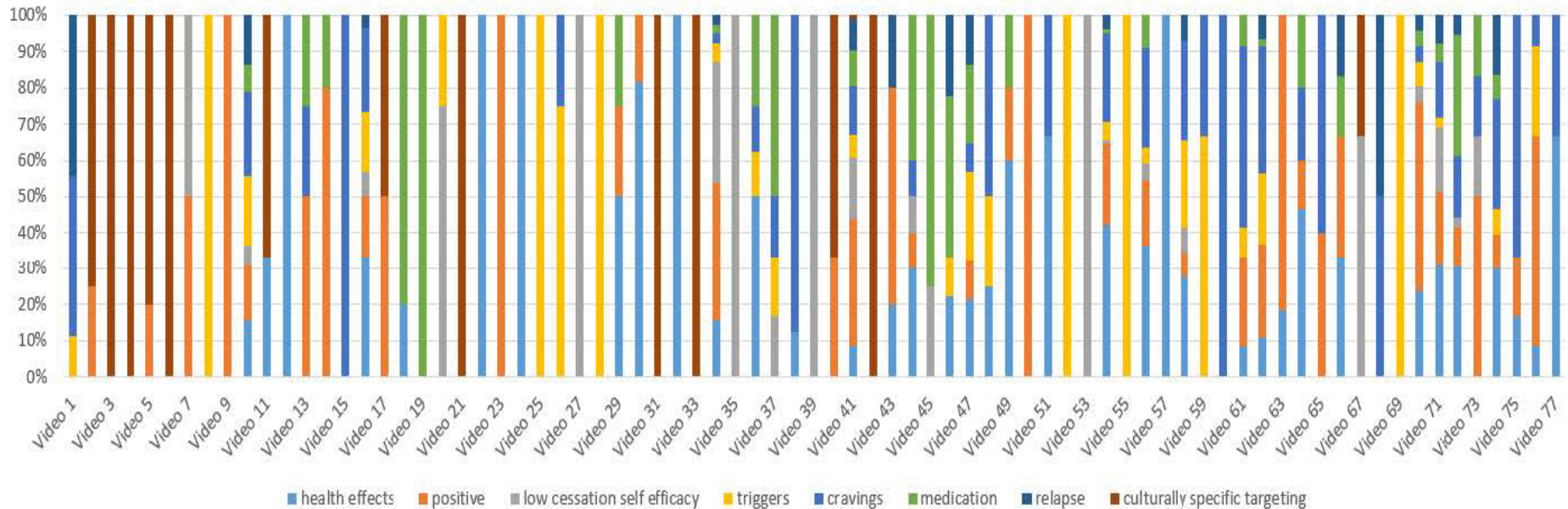
Photo by [Nicolas Ladino Silva](#) on [Unsplash](#)

Tailoring via Machine Learning (1)



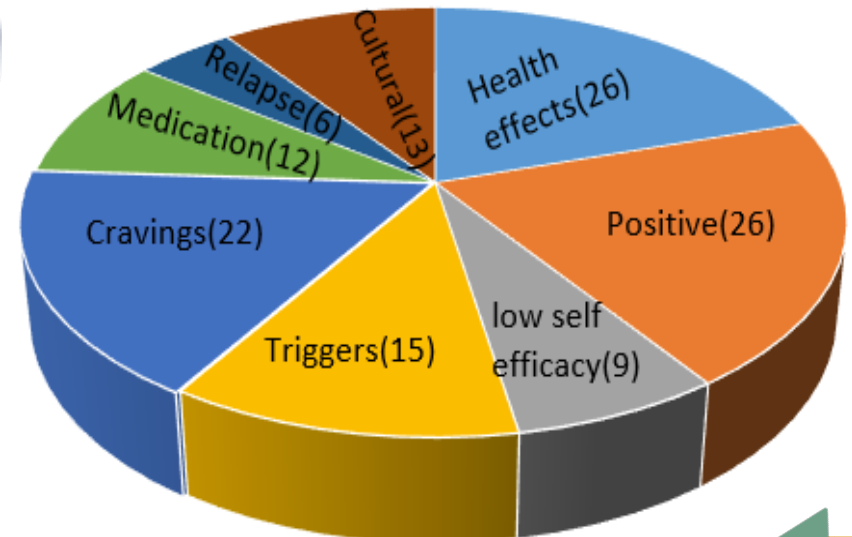
Source: Asaeikheybari G, Hooper MW, Huang MC. A context-adaptive smoking cessation system using videos. Smart Health (Amst). 2021 Mar;19:100148. doi: 10.1016/j.smhl.2020.100148. Epub 2020 Nov 21. PMID: 33299925; PMCID: PMC7720880.

Tailoring via Machine Learning (2)



Percentage distribution of each category among the messages related to each video

Categorization results and the number of videos in each group



Tailoring via Wearable Sensors ⁽¹⁾



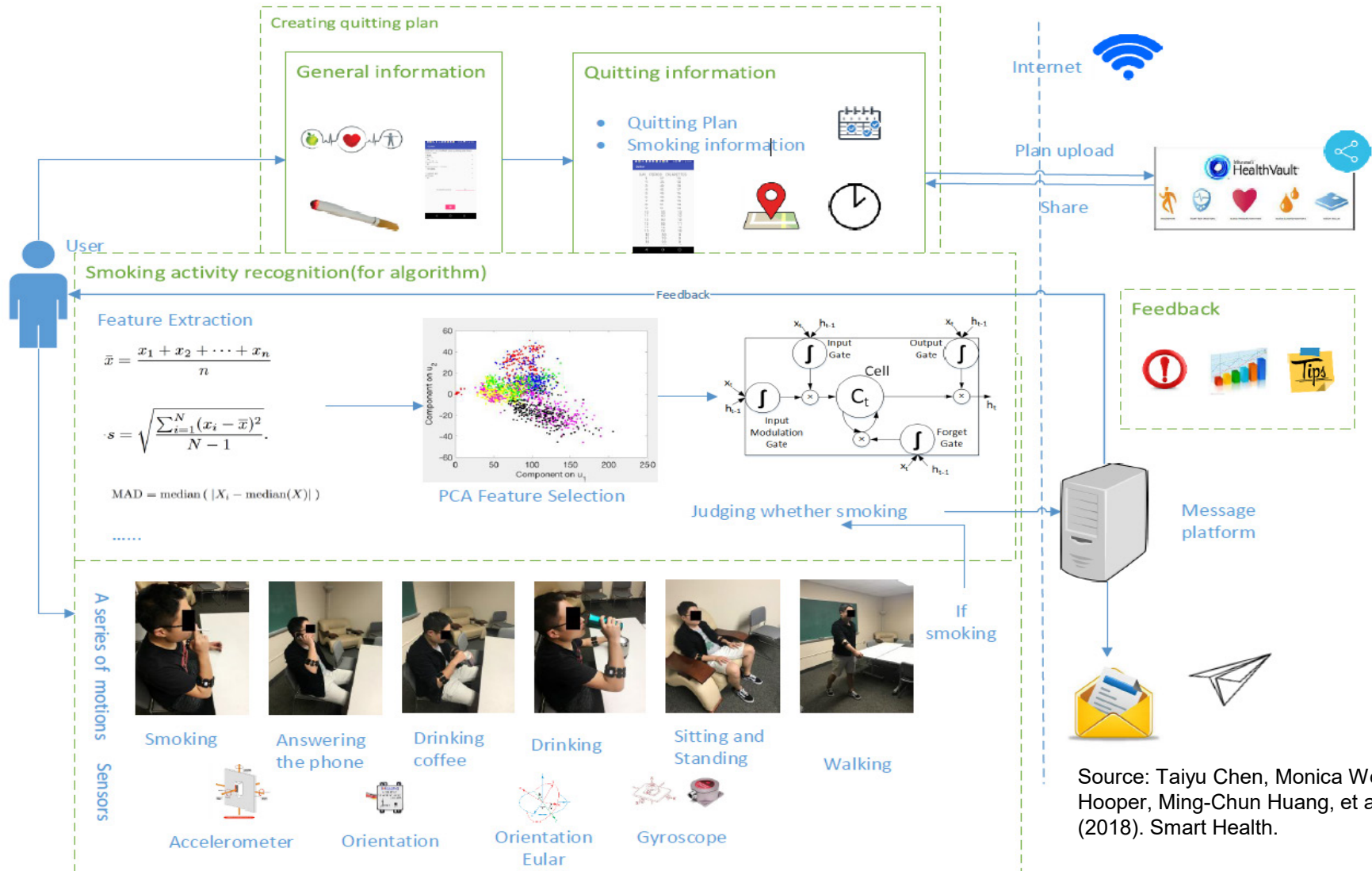
Source: Taiyu Chen, Monica Webb Hooper, Ming-Chun Huang, et al. (2018). Smart Health.



National Institute
on Minority Health
and Health Disparities



Tailoring via Wearable Sensors (2)



Source: Taiyu Chen, Monica Webb Hooper, Ming-Chun Huang, et al. (2018). Smart Health.

Conclusion: What Should We Be Doing Differently to Reach Those Most In Need?

- Need interventions to reduce or eliminate health disparities
 - Modifiable mechanisms of change
- Health equity promotion: Interventions to target unique population needs
- Culturally specific and responsive
- Accessible, translate into multiple formats
- Dissemination is important – plan at the outset



Thank you!



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Prevention in Focus Webinar Series

SAVE THE DATE!

October 10, 2024
1pm – 2 pm EST

**Topic: Emerging Diagnostics
and Therapeutics for
Alzheimer Disease**

Prevention in Focus Webinar Series



Volume 25, Issue 3 supplement

July 2024

Supplemental Issue: Design and Analytic Methods to Evaluate Multilevel Interventions to Reduce Health Disparities

Issue Editors: David M. Murray, Melody S. Goodman

13 articles in this issue

Design and Analytic Methods to Evaluate Multilevel Interventions to Reduce Health Disparities: Rigorous Methods Are Available

David M. Murray & Melody S. Goodman

EditorialNotes | Open access | 01 July 2024 | Pages: 343 – 347

Prevention in Focus Webinar Series

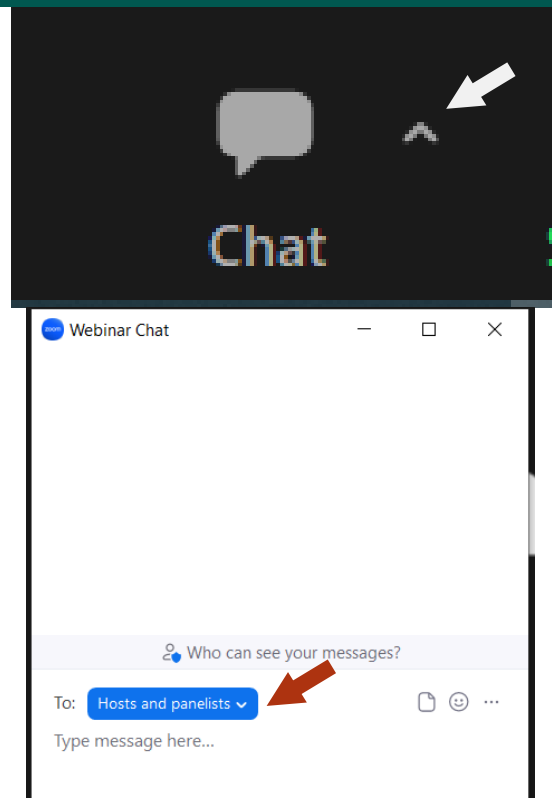
Methods Topic	Hughes et al.	Wang et al.	Sperger et al.	Strayhorn et al.	Guastaferro et al.	Jackson et al.	Williamson et al.	Harrall et al.	Guilamo-Ramos et al.	Houghton and Adkins-Jackson	Rink et al.	Mulawa et al.
Power calculations / sample size	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓
Using simulation to inform study design		✓		✓	✓	✓	✓				✓	✓
Parallel group randomized trial design		✓					✓	✓	✓	✓		
Stepped wedge designs	✓		✓								✓	
Factorial / optimization designs				✓								✓
Intervention development							✓		✓	✓	✓	
Intervention co-creation / co-design							✓		✓		✓	
Subgroup effects / treatment heterogeneity		✓			✓	✓	✓					
Health equity metrics or outcomes				✓	✓	✓			✓			✓
Mixed-methods approaches										✓	✓	✓
Time-varying intervention effects	✓		✓									
Intervention designs for small sample size											✓	

Kay L. Wanke, Ph.D., M.P.H.

Q & A Moderator | Deputy Director, Tobacco
Regulatory Science Program (TRSP) | NIH Office of
Disease Prevention (ODP)



Prevention in Focus Webinar Series



Q&A Session

Please send us your questions via
the **Chat pod** directed to
Hosts and Panelists



Thank You!

See you for our next webinar
on October 10, 2024!

Artist: Aurora Kroenke, "Community is Health" Submitted to ODP Art Challenge:
How Prevention Can Create Better Health for Everyone, 1st Place Teen category
Winner.



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