Helping Black Patients in Wisconsin Quit Smoking: A Call for Clinical Action

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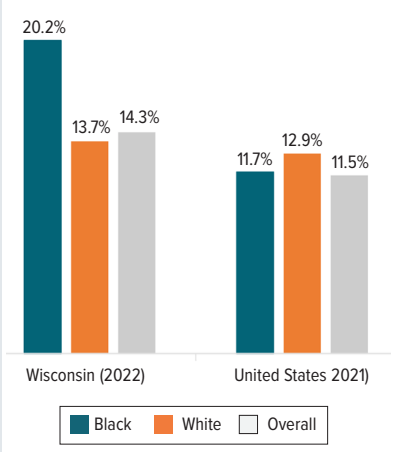
Wisconsin faces a major health disparity that is negatively affecting the health of the state – Black adults have a smoking prevalence rate that has been consistently higher than the rate of White adults in Wisconsin. The 2021 National Health Interview Survey showed that the smoking rate of all adults (aged 18 and older) in the United States is 11.5%, and the rates of smoking are about equal among Black and White adults (11.7% and 12.9%, respectively).[1] However, according to the 2022 Wisconsin Behavioral Risk Factor Surveillance Survey, while approximately 14.3% of all Wisconsin adults smoked, an examination of smoking rates by race shows that 20.2% of Black adults smoked compared to about 13.7% of non-Hispanic White adults[2] (see Figure).

This disparity results in higher rates of smoking-caused morbidity and mortality in Black adults in Wisconsin. Specifically, Black adults who smoke are more likely to develop and die from a variety of tobacco-caused diseases, including cardiovascular diseases, chronic obstructive pulmonary disease, and cancer, than are White adults who smoke.[3] In 2019, Black adults had higher cancer mortality rates overall compared to other racial and ethnic groups.[4] Black males have especially high lung cancer incident rates, and they also have worse survival rates.[5] From 2001 to 2005, 22% of deaths among Black people in Wisconsin were attributable to cancer, 21% to heart disease, and 6% to stroke – all diseases caused by cigarette smoking.[6]

The high smoking prevalence rate among Black adults in Wisconsin and the resultant health risks warrants a renewed focus on clinical interventions to help Black individuals who smoke to quit. Such interventions should reflect an understanding of resources, challenges, smoking patterns, and quitting behaviors among Black individuals in Wisconsin. In this way, the medical community can be better positioned to support Black people to stop smoking.

Figure. Smoking Rates Among Blacks, Whites, and Overall Highlighting the Racial Disparity of Smoking in Wisconsin and the United States[1,2]



Smoking Among Black Adults in Wisconsin: Relevant Evidence

It is likely that numerous factors contribute to the higher rates of smoking among Black adults in Wisconsin. Below we describe critical issues that need to be understood and addressed through clinical interventions and public policy actions to provide the necessary support for Black adults who smoke.

Black adults who smoke are more likely to smoke menthol cigarettes and to smoke fewer cigarettes per day or intermittently compared to White individuals who smoke. The smoking patterns of Black adults overall in the United States differ from some other racial and ethnic groups. For instance, compared with White adults who smoke, Black adults are more likely to smoke menthol cigarettes and to smoke intermittently.[7,8] With regard to menthol smoking, in Wisconsin, nearly 90% of Black adults who smoke use menthol cigarettes compared to 41% of White adults who smoke.[9] Menthol cigarettes are as dangerous to an individual's health as nonmenthol cigarettes and may, in fact, be associated with higher rates of certain adverse health outcomes, such as lung

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cancer. Moreover, there is evidence that smoking menthol cigarettes makes it less likely that the individual can quit smoking successfully.[10,11] With respect to smoking heaviness, 50% of Black adults smoke 10 or fewer cigarettes per day (compared with 18% to 20% in the overall population), yet they experience a disproportionate share of tobacco-related disease and mortality.[12] Despite the fact that Black adults smoke fewer cigarettes than White adults, they still benefit from evidence-based interventions to help them quit.

Black adults who smoke are highly interested in quitting and try to quit at a higher rate than do White adults but are less successful. According to national data from 2015, 73% of Black adults want to quit smoking[13] and 63% make a quit attempt in a given year, whereas only 53% of White adults report making a quit attempt each year.[14] However, research shows that Black adults who smoke are, in fact, less likely to quit smoking successfully than White adults despite their making more quit attempts.[14]

Reduced success in quitting among Black adults may be related in part to their lower likelihood of receiving or using evidence-based smoking treatment. Less than 30% of Black adults who smoke use evidence-based smoking cessation treatment (eg, counseling, pharmacotherapy).[14] Black individuals' reduced use of evidence-based smoking treatment may be due to barriers to accessing these treatments, including reduced access to health care and a lower likelihood of receiving pharmacotherapy and/or clinical advice to quit.[15] In a nationally representative survey, only about 56% of Black adults who smoke reported that they received advice to quit smoking over the past year.[14] Other evidence shows that Black adults who smoke are especially unlikely to receive advice to quit if they are uninsured and their rate of receiving such advice is significantly less than it is for uninsured White individuals.[16]

Black adults' relative underuse of smoking cessation medications may be due, in part, to their concerns about the safety and addictiveness of cessation medications. A survey of people who currently smoke cigarettes found that compared with White adults, Black adults reported more concern about the potential to become addicted to smoking medications and were also less likely to endorse the need for such medications.[17,18] Such attitudes were predictive of less smoking cessation pharmacotherapy use. This may be due to a history of medical mistrust and negative experiences with the health care system. Clinicians should be sensitive to and explore patients' concerns, providing information to their patients in a sensitive and nonjudgmental manner.

A door-to-door survey done in inner-city Milwaukee found evidence that individuals living in areas of socioeconomic deprivation may benefit from additional information on smoking and quitting. The survey sample was recruited in an inner-city area of significant socioeconomic deprivation (ZIP code 53212). Of the residents sampled (79% of whom were Black), 42% reported smoking cigarettes. Of those who reported smoking, 83% believed quitting smoking was just a matter of will power, only 19% had used any medication to try to quit, and 56% had never heard of the Wisconsin Tobacco Quit Line.[19] These findings suggest that some of the disparities faced by Black individuals may reflect socioeconomic disadvantage in addition to race per se.[20]

Black individuals may respond differently to smoking cessation medications. Importantly, Black individuals who smoke may respond differently to evidence-based treatments than White individuals. For example, one large study found that varenicline is an effective smoking cessation medication for Black adults, but that nicotine replacement therapies and bupropion were not.[20] However, there are other studies that have shown that the nicotine patch and bupropion are effective.[21]

The tobacco industry targets Black individuals with marketing and other strategies to promote their addiction to tobacco products. For decades, the tobacco industry has targeted Black communities – including those in Wisconsin – in their marketing of tobacco products. This racial targeting is facilitated by the strong degree of racial segregation in cities like Milwaukee and has contributed to the high prevalence of tobacco use in these communities. A city of Milwaukee tobacco point-of-sale study compared the marketing of tobacco products in neighborhoods with different racial makeups. Relative to other locales, in neighborhoods with higher populations of Black persons, cigarettes were far more likely to be displayed near candy (42% vs 5%) and within 3 feet of the floor (35% vs 11%).[22] These tactics may enhance cigarette appeal and access in children and increase the perceived availability and accessibility of tobacco products among Black adults. Moreover, such product placement may encourage impulse purchases of tobacco products, cue cravings, and undermine quit attempts.[23] The Milwaukee point-of-sale study also found that outdoor marketing of menthol cigarette brands is twice as likely (68% vs 34%) in neighborhoods that had higher proportions of Black persons versus neighborhoods with higher proportions of White persons.[21] In addition, menthol price promotions were also much more common in the predominantly Black neighborhoods (69% vs 30%).[22]

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The Pending Menthol Ban

There are important pending policy changes that have the potential to improve the health of Black adults who smoke. The US Food and Drug Administration (FDA) has indicated that in 2024, it will release a new product standard that prohibits menthol as a characterizing flavor in cigarettes. The result of this action will be the banning of all menthol cigarettes. This action has the potential to significantly reduce

disease and death from combusted tobacco product use, especially in Black populations (eg, 90% of Black adults in Wisconsin smoke menthol cigarettes). The pending FDA action will prompt many people who smoke menthol cigarettes to consider quitting combustible cigarettes. According to the Centers for Disease Control and Prevention (CDC), if menthol cigarettes are no longer available, an estimated 17 200 additional adults in Wisconsin who smoke will quit.[24] Many of these individuals will be Black. Wisconsin clinicians should prepare for this opportunity to help more Black individuals who smoke to quit. There are resources available to help patients who use menthol cigarettes to quit (eg, www.becomeanex.org/ex-resources/about-quitting/get-ready-to-quit/quitting-menthol-cigarettes/, www.cdc.gov/tobacco/basic_information/menthol/index.html).

Box. Clinical Strategies to Help Black Adults Who Smoke to Quita

- Urge Black patients who smoke to quit and to use evidence-based smoking cessation pharmacotherapy and counseling. When recommending pharmacotherapy for smoking cessation for Black adults, consider varenicline as the first-line medication as it has been shown in some research to be more effective than nicotine replacement therapy in Black adults. Varenicline treatment was effective even for light smokers (<10 cigarettes per day, see Cox et al.)
- Black patients who smoke may have concerns about the safety and addictiveness of cessation medications. When recommending pharmacotherapy for smoking cessation, clinicians should be sensitive to these concerns and answer questions and provide information to their patients in a sensitive and nonjudgmental manner.
- In Wisconsin, an estimated 90% of Black adults who smoke use menthol cigarettes. The pending menthol ban offers a valuable opportunity for Wisconsin clinicians to assist Black individuals and other menthol users to quit smoking because many of them will consider quitting when the menthol ban is implemented.
- Recognize that Black patients may be exposed to greater tobacco industry targeted advertisements and promotions that can challenge such individuals during quit attempts. Clinicians should offer recommendations on how to cope with triggers that Black patients may experience when exposed to this advertising.
- Consider using culturally tailored skills training when providing counseling to help Black patients who smoke to quit. The National Cancer Institute has made available materials that Black individuals can use to support their quit attempts (https://ebccp.cancercontrol.cancer.gov/programDetails.do?programId=312567)
- A cessation resource from the CDC called Pathways to Freedom can be recommended to Black patients who smoke. This evidence-based resource is available in brochure (https://www.cdc.gov/tobacco/quit_smoking/how_to_quit/pathways/index.htm) and video (https://www.youtube.com/watch?v=Ut5yRoJ5tKo)

[a]Based, in part, on *Helping African American Individuals Quit Smoking: Finally, Some Progress*[25]

The Challenge to Wisconsin Clinicians

This editorial has highlighted factors that challenge Wisconsin clinicians to address one of the critical issues damaging the health of Black persons living in the state. First, in Wisconsin, smoking prevalence is higher in Black adults than in White adults. Second, Black adults who smoke differ from White adults who smoke on numerous dimensions, and understanding these differences can aid in treating Black adults who smoke. Importantly, Black adults are more likely to want to quit and more likely to try to quit – so the goal for clinicians is to ensure that their Black patients have the necessary counseling and medication to increase their chances of success (see Box). For instance, clinicians should be sure to discuss the importance of using medication to aid in quit attempts and should encourage discussion about medication use and safety. Black individuals have been especially unlikely to use cessation medications. Clinicians should not only be prepared to strongly encourage their use but also should encourage the use of varenicline, which has been shown in some research to be more effective than other medications in helping Black adults stop smoking. Third, the pending menthol ban offers a valuable opportunity for Wisconsin clinicians to assist Black individuals and other menthol users to quit smoking. Both clinicians and health systems should prepare for this policy change. This could include making sure that clinicians are aware of the ban and knowledgeable about how to encourage their patients to quit smoking. Health systems should ensure that resources and training are available to offer, refer to, and deliver evidence-based smoking treatment. One step towards these goals is for clinicians to acquaint themselves with clinical strategies that can help Black adults quit smoking successfully as listed in the Box.

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REFERENCES

1. Cornelius ME, Loretan CG, Jamal A, et al. Tobacco product use among adults - United States, 2021. *MMWR Morb Mortal Wkly Rep*. 2023;72(18):475-483. doi:10.15585/mmwr.mm7218a1

2. BRFSS prevalence & trends data. Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. July 19, 2023. Accessed January 16, 2024. https://www.cdc.gov/brfss/brfssprevalence/

3. Tobacco use among U.S. racial/ethnic minority groups – African Americans, American Indians and Alaska Natives, Asian Americans and Pacific Islanders, Hispanics. A Report of the Surgeon General. Executive summary. *MMWR Recomm Rep*. 1998;47(RR-18):v-16.

4. Lawrence WR, McGee-Avila JK, Vo JB, et al. Trends in cancer mortality among black individuals in the US from 1999 to 2019. *JAMA Oncol*. 2022;8(8):1184–1189. doi:10.1001/jamaoncol.2022.1472

5. American Cancer Society. Cancer facts and figures 2022. Accessed November 21, 2023. https://www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/annual-cancer-facts-and-figures/2022/2022-cancer-facts-and-figures.pdf

6. Wisconsin Department of Health and Family Services. Wisconsin minority health report 2001-2005. January 2008. Accessed November 21, 2023. https://www.dhs.wisconsin.gov/publications/p4/p45716.pdf

7. Trinidad DR, Pérez-Stable EJ, Emery SL, et al. Intermittent and light daily smoking across racial/ethnic groups in the United States. *Nicotine Tob Res*. 2009;11(2):203-210. doi:10.1093/ntr/ntn018

8. Curtin GM, Sulsky SI, Van Landingham C, et al. Patterns of menthol cigarette use among current smokers, overall and within demographic strata, based on data from four U.S. government surveys. *Regul Toxicol Pharmacol*. 2014;70(1):189-196. doi:10.1016/j.yrtph.2014.06.018

9. Palmersheim KA. Center for Urban and Population Health, University of Wisconsin-Milwaukee. Wisconsin

tobacco facts: Menthol cigarette use among Wisconsin adults. March 2024. Accessed August 29, 2024. https://www.cuph.org/ uploads/2/5/8/5/25855930/tobacco_facts_menthol_use_ march_2024_final.pdf

10. Smith SS, Fiore MC, Baker TB. Smoking cessation in smokers who smoke menthol and non-menthol cigarettes. *Addiction*. 2014;109(12):2107-2117. doi:10.1111/add.12661

11. Cook S, Hirschtick JL, Patel A, et al. A longitudinal study of menthol cigarette use and smoking cessation among adult smokers in the US: assessing the roles of racial disparities and e-cigarette use. *Prev Med.* 2022;154:106882. doi:10.1016/j.ypmed.2021.106882

12. Nollen NL, Mayo MS, Sanderson Cox L, et al. Predictors of quitting among African American light smokers enrolled in a randomized, placebo-controlled trial. *J Gen Intern Med*. 2006;21(6):590-595. doi:10.1111/j.1525-1497.2006.00404.x

13. Gonzalez M, Sanders-Jackson A, Song AV, Cheng KW, Glantz SA. Strong smoke-free law coverage in the United States by race/ethnicity: 2000-2009. *Am J Public Health.* 2013;103(5):e62-e66. doi:10.2105/AJPH.2012.301045

14. Babb S, Malarcher A, Schauer G, Asman K, Jamal A. Quitting smoking among adults - United States, 2000–2015. *MMWR Morb Mortal Wkly Rep*. 2017;65:1457–1464. doi:10.15585/mmwr.mm6552a1

15. Baker TB, Burris JL, Fiore MC. Helping African American individuals quit smoking: finally, some progress. *JAMA*. 2022;327(22):2192-2194. doi:10.1001/jama.2022.9161

16. Zhang L, Babb S, Schauer G, Asman K, Xu X, Malarcher A. Cessation behaviors and treatment use among U.S. smokers by insurance status, 2000-2015. *Am J Prev Med.* 2019;57(4):478-486. doi:10.1016/j.amepre.2019.06.010

17. Hendricks PS, Westmaas JL, Ta Park VM, et al. Smoking abstinence-related expectancies among American Indians, African Americans, and women: potential mechanisms of tobacco-related disparities. *Psychol Addict Behav.* 2014;28(1):193-205. doi:10.1037/a0031938

18. Yerger VB, Wertz M, McGruder C, Froelicher ES, Malone RE. Nicotine replacement therapy: perceptions of African-American smokers seeking to quit. *J Natl Med Assoc*. 2008;100(2):230-236. doi:10.1016/s0027-9684(15)31211-6

19. Christiansen B, Reeder K, Hill M, Baker TB, Fiore MC. Barriers to effective tobacco-dependence treatment for the very poor. *J Stud Alcohol Drugs*. 2012;73(6):874-884. doi:10.15288/jsad.2012.73.874

20. Nollen NL, Ahluwalia JS, Sanderson Cox L, et al. Assessment of racial differences in pharmacotherapy efficacy for smoking cessation: secondary analysis of the EAGLES randomized clinical trial. *JAMA Netw Open*. 2021;4(1):e2032053. doi:10.1001/jamanetworkopen.2020.32053

21. Ahluwalia JS, McNagny SE, Clark WS. Smoking cessation among inner-city African Americans using the nicotine transdermal patch. *J Gen Intern Med*. 1998 Jan;13(1):1-8. doi:10.1046/j.1525-1497.1998.00001.x.

22. Laestadius L, Sebero H, Myers A, et al. Identifying disparities and policy needs with the STARS surveillance tool. *Tob Regul Sci.* 2018;4(4):12-21(10). doi:10.18001/TRS.4.4.2

23. The war in the store. Counter Tools. Updated October 31, 2023. Accessed November 21, 2023. https://countertobacco.org/the-war-in-the-store/

24. Smoking and tobacco use: state menthol fact sheets-Wisconsin. Centers for Disease Control and Prevention. Updated February 23, 2024. Accessed January 21, 2024. https://www.cdc.gov/tobacco/basic_information/menthol/state-menthol-fact-sheets.html#WI

25. Baker TB, Burris JL, Fiore MC. Helping African American individuals quit smoking: finally, some progress. *JAMA*. 2022;327(22):2192-2194. doi:10.1001/jama.2022.9161.

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