

THE PRESENT AND FUTURE

JACC REVIEW TOPIC OF THE WEEK

Eliminating Disparities in Cardiovascular Disease for Black Women



JACC Review Topic of the Week

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ABSTRACT

Black women are disproportionately affected by cardiovascular disease with an excess burden of cardiovascular morbidity and mortality. In addition, the racialized structure of the United States shapes cardiovascular disease research and health care delivery for Black women. Given the indisputable evidence of the disparities in health care delivery, research, and cardiovascular outcomes, there is an urgent need to develop and implement effective and sustainable solutions to advance cardiovascular health equity for Black women while considering their ethnic diversity, regions of origin, and acculturation. Innovative and culturally tailored strategies that consider the differential impact of social determinants of health and the unique challenges that shape their health-seeking behaviors should be implemented. A patient-centered framework that involves collaboration among clinicians, health care systems, professional societies, and government agencies is required to improve cardiovascular outcomes for Black women. The time is “now” to achieve health equity for all Black women. (J Am Coll Cardiol 2022;80:1762-1771) © 2022 the American College of Cardiology Foundation. Published by Elsevier. All rights reserved.

Cardiovascular disease (CVD) is the leading cause of death in women in the United States. Black women are disproportionately affected and have higher cardiovascular (CV) morbidity and mortality rates compared to women of other race/ethnicities.^{1,2} Although there is a growing recognition of worsening trends of disparities in care delivery and CV outcomes,^{3,4} a persistent

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HIGHLIGHTS

- Black women bear a disproportionate burden of cardiovascular morbidity and mortality.
- The ethnic diversity, regions of origin, and acculturation of Black women should be considered in the design of research studies and culturally tailored strategies.
- Sustainable solutions that address social determinants of health and differential effects of risk factors should be implemented using a patient-centered framework and collaboration among clinicians, health care systems, professional societies, and government agencies.

gap remains in developing and implementing strategies to deliver equitable care for Black women; younger Black women are 2 to 3 times more likely to experience premature death from CV causes than White women,^{5,6} and Black women living in rural areas experience the highest CV mortality rates in the United States.⁶

The evidence for disparities in health outcomes for Black women is overwhelming. We highlight select CV risk factors (traditional, female specific, and emerging) that disproportionately affect Black women in **Table 1** and disparities in select CVD and stroke in **Table 2**. The data cited often include only Black and White women, because of the paucity of data available on women of other underrepresented races and ethnicities, who we recognize would benefit from a similar exploration.

ACHIEVING CARDIOVASCULAR HEALTH EQUITY FOR BLACK WOMEN

Achieving CV health equity is of particular importance for cardiologists and other clinicians providing CV care, and it is now one of the quintuple aims of the American College of Cardiology (ACC).²⁸ The ACC defines health equity as “a human right that allows everyone to achieve the best attainable CV health and outcomes by overcoming all avoidable barriers.”²⁹ The road to health equity is a difficult path. The reality of differential access to quality health care for certain racial/ethnic, gender, age, socioeconomic, geographic, and sexual orientation groups plagues the U.S. health care system. In addition to commonly cited differences in social determinants of health (SDoH), among Black women and other populations, these disparities likely also reflect the influence of

systemic racism, unconscious bias on physician clinical decision making, differential access to advanced medical care, and patient mistrust. If we are to successfully overcome these “avoidable barriers” to Black women’s optimal CV health, we must understand the population of interest. We must explore the important roles of Black women’s ethnicities, regions of origin, and acculturation; the differential effects of CV risk factors; and the impact of SDoH.

Given the incontrovertible evidence, we issue a call to action to address the crisis of poor CV outcomes in Black women and offer solutions to close the gaps in health care delivery. We must move beyond describing the disparities to implementing solutions that address them. The urgency is “now” to improve the CV health and to achieve CV health equity for Black women.

ACKNOWLEDGING AND ACCOUNTING FOR THE HETEROGENEITY OF BLACK WOMEN

Race/ethnicity classification in medical research remains a challenge.³⁰⁻³⁴ The majority of research reporting on CVD outcomes among Black women does not consider the varied experiences, backgrounds, and ethnic origins of this population. It is important to acknowledge the limitations of characterizing Black women as a monolithic group. The use of racial categories dates to the 18th and 19th centuries, when skin color and physical traits attributed to different continents were used to identify White people and populations of African origin.^{35,36} This categorization remains entrenched in our society and influences how research is conducted. Although ethnicity captures identities bestowed on groups of people based on their culture, language, and religion, among others, Black ethnic groups are rarely described in biomedical research. The appropriate categorization of race/ethnicity in biomedical research, such as the classification of biracial and multiracial people, can be complex.³⁴ Nonetheless, there is now a greater appreciation that race is a social, cultural, and geopolitical construct instead of a biological variable.

In the United States, non-Hispanic Black people make up 14% of the population and increased by 29% between 2010 and 2019.³⁷ In 2019, almost 22 million women were classified as “Black.”³⁷ Based on data collection instruments and migration trends, Black women comprise those who are United States born (African American), African born (African), and Caribbean born (Afro-Caribbean). These subgroups are often studied as a homogenous group and

ABBREVIATIONS AND ACRONYMS

ACC = American College of Cardiology

CV = cardiovascular

CVD = cardiovascular disease

SDoH = social determinants of health

TABLE 1 Select Cardiovascular Risk Factors in Black Women

Hypertension	Prevalence: NHB women have the highest adjusted prevalence of hypertension, nearly 1.5 times greater than Hispanic and NHW women (56.7%, 36.8%, and 36.7% respectively). ⁷ Lifetime risk: 85.7% for Black women vs 69.3% for White women. (Data from 13,160 participants in the Framingham Offspring Study, CARDIA, and ARIC). ⁸ Awareness, treatment, and control: Although NHB women have higher rates of hypertension awareness and treatment compared to NHW women (70.1% vs 64.8% and 60.9% vs 57.7%, respectively), the rate of hypertension control is paradoxically lower (22.8% vs 25.4%). ²
Diabetes	Diagnosis: NHB women have a 1.13-fold increased prevalence of undiagnosed diabetes compared to NHW women (3.3% vs 2.9%, respectively). ² Attributable death rate: NHB women have a 2-fold higher age-adjusted death rate attributable to diabetes than NHW women (32.1 vs 14.2 per 100,000 population, respectively). ² Risk factor control: Older Black women with diabetes are the least likely group to have risk factors (HbA _{1c} , blood pressure, LDL-C) that are at or below both stringent and less stringent treatment targets compared to White women and Black and White men with diabetes. ⁹
Dyslipidemia	Treatment: Among women eligible for statin therapy, Black women were half as likely as White women to report statin use (adjusted odds ratio: 0.53; 95% CI: 0.36-0.78). ¹⁰
Obesity	Prevalence: Among all racial, ethnic, and sex groups in the United States, NHB women have the highest prevalence of obesity (56.9%), 1.5 times that of NHW women (39.8%). ¹¹
Psychosocial stress	In the Women's Health Initiative, higher stressful life events were associated with incident CVD in older Black women (HR [55 years], highest vs lowest quartile: 1.80 [95% CI: 1.27-2.54] and HR [65 years], highest vs lowest quartile: 1.40 [95% CI: 1.16-1.68]). ¹²
Adverse pregnancy outcomes	Complications: Compared with NHW women, NHB women are significantly more likely to experience preterm birth, hypertensive disorders of pregnancy, and small-for-gestational-age birth (12.2% vs 8.0%, 16.7% vs 13.4%, and 17.2% vs 8.6%, respectively; $P < 0.05$ for all). ¹³ Mortality: Black women have a 2.9 times higher pregnancy-related mortality ratio compared to White women (55.3 vs 19.1 per 100,000 births), and this has been observed regardless of the urban-rural category classification; this disparity has persisted over time, irrespective of age and education. ^{14,15} Stroke risk: Among women with pregnancy-induced hypertension, Black women had higher stroke risk compared with NHW women (Black women, age-adjusted risk ratio: 2.07; 95% CI: 1.86-2.30). ¹⁶
Racism and discrimination	Incident hypertension: Lifetime discrimination is a risk factor for the development of hypertension among African American women and is higher than among African American men. ¹⁷
Social determinants of health	Social isolation: Associated with increased CVD mortality in Black women compared to White women (HR: 2.13 [95% CI: 1.44-3.15] vs 1.84 [95% CI: 1.68-2.01]). ¹⁸ Socioeconomic status vs race: Black women with lower social economic status have almost 3-fold odds of having worse cardiovascular health than White women in both rural and urban areas (rural odds ratio: 2.68; 95% CI: 1.44-4.90; $P = 0.001$; urban odds ratio: 2.92; 95% CI: 1.62-5.23; $P = 0.0003$). ¹⁹ Occupation: Black women are overrepresented in health care professions at 13.7%, twice the representation of Black women in the U.S. labor force (6.9%) compared to any other population group, but are employed mostly in the lowest-wage and most hazardous jobs. ²⁰

ARIC = Atherosclerosis Risk In Communities; CARDIA = Coronary Artery Risk Development In young Adults; HbA_{1c} = hemoglobin A_{1c}; LDL-C = low-density lipoprotein cholesterol; NHB = non-Hispanic Black; NHW = non-Hispanic White.

compared to White women without in-depth consideration of differences in ethnicity, ancestry, genetic admixture, and effects of SDoH.³⁸ Although these Black ethnic groups share African ancestry, their differences should be considered to achieve CV health equity for the diverse population of Black women.

Immigration is an important SDoH that influences the CV health of Black women born outside the United States. Compared to persons born in the United States, immigrants can be more adversely affected by other SDoH such as food insecurity, poverty, poor health care access, and discrimination and may have residual psychological effects from prior exposure to geopolitical conflict or violence.³⁹ Upon migration, acculturation—the bidirectional cultural and psychological changes that occur because of contact between 2 or more cultures and their individual members⁴⁰—further influences the CV health of Black women born outside the United States.

Few studies have examined the heterogeneity of CVD among Black women. In a prior study, African and Afro-Caribbean adults had a lower prevalence of CVD risk factors compared to African American adults.⁴¹ Acculturation has been shown to negatively affect Black women born outside the United States because increased years of U.S. residence corresponds with changes in health behaviors and disruptions in prior social networks. In the Boston Birth Cohort study, although Black women born outside the United States had a lower risk of developing preeclampsia, those with 10 or more years of U.S. residence (a proxy for acculturation) had similar odds of developing preeclampsia compared with non-Hispanic Black women born in the United States.⁴² Other intersectional identities further increase CVD risk and disparities in outcomes among Black women. Black individuals of sexual minority groups are disproportionately affected by CVD and have higher rates of modifiable CV risk factors and poorer mental health compared to cisgender heterosexual Black women.⁴³ These individuals experience additional social stressors because of self-stigma, the expectation of rejection, the hiding of their sexual and gender identity, and more adverse SDoH.^{44,45} The racialized structure of U.S. society shapes CVD research and health care delivery for Black women; to advance CV health equity for all Black women, innovative and culturally tailored strategies and research studies that consider ethnicity, acculturation, and sexual orientation and gender identity should be implemented.

SYSTEMIC BARRIERS

LOW HEALTH CARE WORKFORCE DIVERSITY. Of all active U.S. physicians, only 2.6% are Black men and 2.8% are Black women⁴⁶; only 3% of U.S. adult cardiologists are Black.⁴⁷ This is important because race concordance for Black patients has been

associated with better outcomes, including adherence to CVD medications.⁴⁸ Compounding this problem is inadequate funding and training of Black scientists. Black physician-scientists are less likely than their White counterparts to receive research grants.⁴⁹ Reasons for this disparate funding success have been attributed to structural racism, gender and implicit bias, lack of mentorship, diversity pressures, and lack of Black individuals in key leadership positions.

FINANCIAL CONSTRAINTS AND REIMBURSEMENT. Black women often face financial constraints and may participate in governmental health insurance programs with the associated limits on clinician choice and coverage for prescription drugs and health services. These governmental health insurance programs often have reduced physician reimbursement compared to private payers, which may be perceived as penalizing clinicians and hospital systems for providing health care to patients from underrepresented racial/ethnic groups.

AN ACTIONABLE ACTION PLAN

Addressing the disparities in biomedical research, clinical trial participation, health care delivery, and CV outcomes in Black women requires recognition of the unique backgrounds and needs of various populations of Black women and requires a multipronged and multilevel approach that includes a collaborative patient-centered framework that engages clinicians, health care systems, professional societies, and government agencies (**Central Illustration**). The following represents a framework for action by role and sphere of influence, and while specific to the health of Black women, a comprehensive adoption of these recommendations would be expected to improve the health of other marginalized populations.

ROLE OF INDIVIDUAL CLINICIANS.

Implement training and mitigate bias and discrimination. Bias and discrimination in health care delivery, especially based on race and gender, are very evident, especially for Black women.⁵⁰ Educating clinicians on implicit bias mitigation may result in increased personal awareness, process change, and enhanced patient trust. Translating these lessons to decision making related to learner selection, hiring, and promotion by health care organizations could have the effect of an increase in health care workforce diversity and, ultimately, the delivery of more equitable health care.²⁹

Stroke	<p>Incidence: Urban Black women ≥ 70 years of age have a higher risk of stroke compared with White women, controlling for age, sex, education, and insurance status (HR: 1.76; 95% CI: 0.845-3.672).²¹</p> <p>Prevalence: The prevalence of stroke among women aged ≥ 20 years is twice as high for NHB compared to NHW women (4.9% vs 2.5%).²</p> <p>Morbidity: Elderly Black women are at higher risk for hospitalization for first ischemic stroke than White women (age-adjusted odds ratio: 1.47; 95% CI: 1.41-1.53).²²</p>
HF	<p>Morbidity: HF hospitalization rates for Black women are nearly 2.5-fold higher compared with those for White women.²³</p> <p>Mortality: Black women have higher age-adjusted HF mortality rates (per 100,000) than women from other racial and ethnic groups (88.9 for NHB, 82.7 for NHW, 34.2 for NH Asian or Pacific Islander, 70.0 for NH American Indian or Alaska Native, and 50.6 for Hispanic women).²</p>
Coronary heart disease	<p>Prevalence: NHB women have a higher prevalence of coronary heart disease (7.2%) compared to NHW women (6.0%).²⁴</p> <p>Mortality: Age-adjusted death rates per 100,000 for coronary heart disease were higher in NHB women compared to NHW women (77.2 vs 62.7).²</p> <p>Treatment: Postmenopausal NHB women in the Women's Health Initiative were less likely to receive revascularization for acute myocardial infarction compared to NHW women.²⁵</p>
Valvular heart disease	<p>There are paucity of data on racial/sex differences in valvular heart disease. Most of the data reported were for racial/ethnic groups not specific to Black women.² NHB women and men are less likely to receive either TAVR or SAVR for aortic stenosis.^{26,27}</p>
<p>HF = heart failure; NH = non-Hispanic; NHB = non-Hispanic Black; NHW = non-Hispanic White; SAVR = surgical aortic valve replacement; TAVR = transcatheter aortic valve replacement.</p>	

Address the unique psychosocial challenges faced by Black women (the mind-heart-body connection).

Black women (patients and clinicians) have historically faced chronic stressors from racial and sexual discrimination, single parenthood, caregiving, and serving as heads of households. They are more likely to report a history of trauma, including exposure to violence, than other racial/ethnic groups.⁵¹ There is now a greater recognition of the association between the mind-heart-body interplay and the development of CVD.⁵² These chronic stressors exert a psychological and physical toll on Black women and adversely affect their health-seeking behaviors and ability to adhere to treatment and preventative behaviors. As such, clinicians should recognize and address these by using validated depression and anxiety screening measures and referring to behavioral health management when needed.⁵² Stereotypes that label Black women as “difficult” or “angry” affect the women’s ability to fully engage in clinical encounters and adhere to prescribed therapy.⁵³ Clinicians should therefore engage in collaborative patient-centered communication and multidisciplinary team-based care that can positively affect the psychological health of Black women.

Enhance patient education and awareness. Black women’s awareness of CVD and stroke must be

increased: currently only 1 in 5 Black women believe they are at risk for heart disease, and only two-thirds are aware of acute myocardial infarction symptoms.⁵⁴ Furthermore, Black women have experienced a steeper decline in awareness of CVD as a leading cause of death compared to White women.⁵⁵ Clinicians should develop and use culturally tailored patient education resources⁵⁶ and public health campaigns such as #29DaysOfHeart⁵⁷ and Release the Pressure⁵⁸ to increase awareness and early identification of heart disease and stroke symptoms and to promote CV risk factor modification through heart-healthy lifestyles, particularly among Black women.

Integrate assessment of SDoH into practice.

Routine assessment of SDoH integrated into the electronic health record is crucial to ensure a comprehensive assessment of socioeconomic factors that influence primary and secondary prevention of CVD beyond the traditional risk factors. However, only 16% of physician practices screen for SDoH.⁵⁹ Identification of patients' social needs should prompt connection to community-based programs and resources to address these concerns. Although the CONNECT (Community-based Organizations Neighborhood Network: Enhancing Capacity Together) trial, which used the Healthify platform to screen and refer patients with social needs, did not observe improvement in hospitalizations and emergency department visits, the intervention improved health care staff's knowledge and confidence in local community-based organizations.⁶⁰ As data become more available on the effectiveness of this approach, clinicians should ensure that this process is patient-centered and does not further alienate those with social needs.

HEALTH CARE SYSTEMS.

Diversify the cardiovascular workforce. One strategy to eliminate health care disparities outlined in the Institute of Medicine's landmark 2003 report *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*,⁶¹ was to increase the number of physicians from underrepresented population groups. Investing in training, support, and ongoing development—not only for Black women physicians and physician-scientists⁶² but for the broader health care workforce—remains a much-needed strategy to provide culturally appropriate care and improve patient outcomes. Career development, mentorship, and sponsorship opportunities for clinicians from historically disenfranchised population groups must be expanded to increase the diversity of leadership in

health care, especially for Black women in medicine.^{63,64}

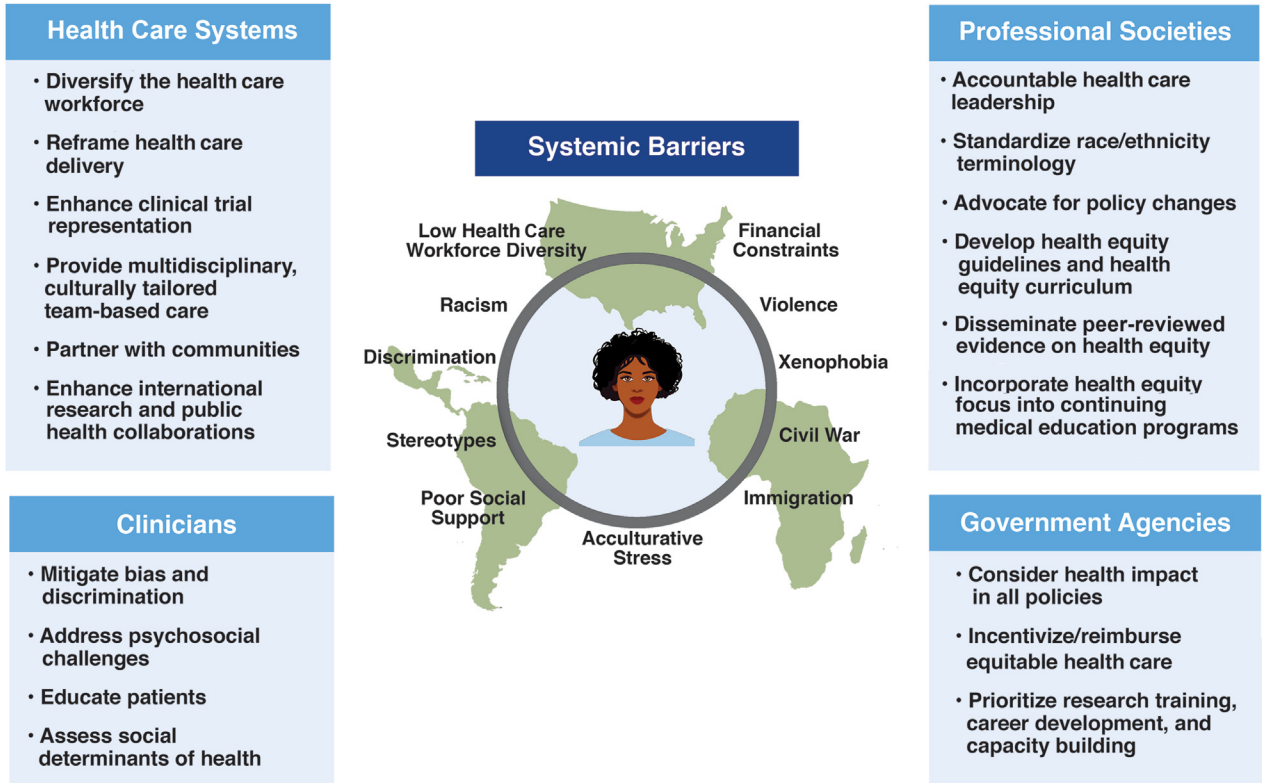
Improve representation of Black women in research and clinical trials. Patients from historically marginalized racial/ethnic groups that traditionally do not participate in research and clinical trials may be more likely to successfully enroll if the principal investigators and the research team are culturally agile and congruent. The development of a racially diverse research team and use of community-based participatory research methods that engage trusted community partners, such as faith-based organizations, have been effective in engaging Black women in CVD research. Seeking to understand the specific needs and barriers to research participation may improve Black women's willingness to participate in research.⁶⁵ The role of a community advisory board in building equitable algorithms and enhancing the experience of Black participants in clinical trials is currently under investigation.⁶⁶

Develop innovative approaches and implementation science to reframe health care delivery. Efforts to increase health care access and reduce disparities among diverse patient populations^{67,68} are important but may be unsustainable or have modest or even converse effects if the cultural, economic, and historical forces that shape these efforts are not considered. For instance, the use of telehealth, without consideration of the racial digital divide, can widen the gap in health care access among Black women.⁶⁹ As medicine undergoes a digital transformation, we must incorporate solutions that address the digital divide, such as ensuring equitable access to broadband and digital health technologies. Using an implementation science framework to create culturally competent interventions by a diverse team can lead to more sustainable and impactful efforts at reducing disparities in care.

Provide multidisciplinary, culturally tailored, team-based care. Multidisciplinary team-based care can be effective in the management of CV conditions such as hypertension and chronic heart failure among patients from underrepresented racial/ethnic groups.⁷⁰⁻⁷² The multidisciplinary care-based model of a pregnancy heart team has the potential to improve maternal outcomes through cross-disciplinary education and collaborative clinical management,⁷³ but this novel approach needs further study to determine its benefit for Black women.

Community health workers also play a key role in CVD prevention and patient education. As trusted voice within their communities, they promote health

CENTRAL ILLUSTRATION Achieving Cardiovascular Health Equity While Recognizing the Heterogeneity of Black Women



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Cardiovascular research rarely acknowledges the heterogeneity of Black women in the United States, which includes those born in the United States (African American), Africa (African), and the Caribbean (Afro-Caribbean), as illustrated by the geographic maps. Each of these groups of Black women experiences unique and differential effects of social determinants of health, such as racism, discrimination, acculturative stress, residual psychological effects from prior exposure to geopolitical conflict or violence, xenophobia, immigration, and disruption of prior social networks. These must be considered in addressing cardiovascular health disparities. The roles of individual clinicians, health care systems, professional societies, and government agencies in achieving health equity for Black women are summarized.

and provide culturally appropriate and cost-effective means of mitigating CVD risk factors.^{74,75} Training community health workers who work in resource-poor communities on CVD risk may be beneficial for educating Black women.⁷⁶ Other innovative approaches include using patient navigators to promote patient engagement and help patients overcome the complexity of health care systems and barriers to health care services and medications.⁷⁷

Develop and leverage community partnerships. Developing partnerships between health care organizations and community stakeholders to promote CV health in trusted and culturally relevant settings, such as beauty salons and faith-based organizations, may help mitigate the lack of engagement that stems

from Black women's mistrust of the health care system.⁷⁸

Enhance international research and public health collaborations. CVD in Black women remains understudied worldwide. In an increasingly globalized world, the opportunity to advance this understanding through international collaborations that support the harmonization of data collection (maintaining cross-national patient registries that collect similar key variables) and exchange across the world should be harnessed. Through idea exchanges and lessons learned from international partnerships in the African Diaspora, reciprocal global CV health collaborations and mutually beneficial programs can be developed. This aligns with

recommendations from the National Academies of Sciences, Engineering, and Medicine to promote CV health by targeting risk factors and implementing best practices.⁷⁹

PROFESSIONAL SOCIETIES.

Standardize race/ethnicity terminology. With greater acknowledgement that race is a social and not a biological construct, there is a need to standardize terminology around race/ethnicity in medical research.^{32,33} In medical journals, terminology describing race/ethnicity is sometimes used inaccurately. The consistent use of standardized and accurate terminology will avoid overgeneralization and incorrect labeling and will more accurately represent the identities and diversity of Black women³⁴ and the subsequent research conclusions ascribed to them. The American Medical Association language guide is a step toward increasing the understanding of inclusive language and advancing health equity.³³

Advocate for policy change. Advocating for policies that focus on achieving health equity for Black women should be imbedded into the structure of medical societies. Disparities in health outcomes do not represent biological differences in populations but are the result of the SDoH, which account for 80% of an individual's clinical health outcome.⁸⁰ These disparities are the result of a historical legacy of institutional and systemic racism that undergirds many of the inequities that exist in our society. The recent episodes of civil unrest and the cry for social justice as well as the disparities uncovered by the COVID-19 pandemic underscore the need to identify and dismantle the root causes of racism to achieve health equity. Medical societies can serve as strong advocates for reframing these principles.

For instance, the Black Maternal Health Momnibus Act of 2021, introduced by the U.S. Congressional Black Maternal Health Caucus, includes 12 individual bills that call for comprehensive solutions to address the maternal health crisis.⁸¹ The Momnibus Act is endorsed by more than 250 professional organizations, and its passage would be a vital step in addressing Black maternal health inequities.

Develop health equity guidelines for clinical practice and disseminate peer-reviewed evidence on health equity. Weaving health equity principles through clinical practice is also crucial. Most clinical practice guidelines focus on addressing biologic risk factors. There is a need for guidelines that incorporate a health equity toolkit and dashboard to identify and develop strategies to promote health equity and

provide guidance to health care systems and clinicians on how to effectively mitigate socioeconomic risk factors that significantly affect clinical outcomes. Only then can we holistically prevent and treat CVD in Black women.

Journals published by professional medical societies and independent journals should highlight research on health equity as a mechanism of educating the medical community on its critical role in achieving more equitable health care delivery. Gender and racial/ethnic diversity should be prioritized for editorial leadership and board positions.

Incorporate a health equity focus into continuing medical education programs. It is important to integrate health equity into scientific conference sessions and other continuing medical education activities so that attendees can familiarize themselves with the impact of SDoH on the course of disease and treatment. Diversity should also be reflected in the selection of planning committee members and conference speakers. Furthermore, continuing medical education activities should incorporate health equity into compliance training, implicit bias training, guideline development, and other core competencies to advance the medical society's understanding of these vital issues.

Hold health care leadership accountable. Diversifying health care organizational leadership and boards should be a priority. Current and future leadership should be held accountable by ensuring that a meaningful portion of their compensation is tied to achieving quality health metrics among patients from historically marginalized racial/ethnic groups, including Black women. Health care systems should incorporate the ACC quintuple aim of promoting CV health equity with the goal of achieving improved patient care and reduced health care costs. Embedding a health equity lens into all patient safety and quality metrics is essential to reducing the health equity gap.

GOVERNMENT AGENCIES AND LEGISLATION.

Consider health impact in all policies. The disparate health outcomes among Black women seen today are a consequence of centuries of structural inequities involving racism, discrimination, and segregation that affect all aspects of living, including education, housing, health insurance, childcare, and employment. To achieve health equity, structural solutions are needed to address these factors. The "health in all policies" approach is a "collaborative approach that integrates health considerations into policymaking across sectors to improve the health of

all communities and people.”⁸² This framework should be applied in all strata of policy making because it recognizes the downstream effects of all policies on health.

Incentivize reimbursement for the equitable care of Black women. Innovative models for payment reform that address inequities in patient safety and outcomes should be encouraged. Payment models that incentivize health equity metrics may help promote equitable health care delivery and should be evaluated.⁸³ Payers should include metrics that incorporate social needs and reimburse hospitals by how effectively these are addressed by health care systems. New payment models that promote primary care and preventive services, especially among socially disadvantaged neighborhoods, may reduce the burden of chronic CV conditions. The Centers for Medicare & Medicaid Services has proposed requiring clinicians to meet a higher threshold to be eligible for financial incentives.⁸⁴ The equity gap may be closed more effectively, especially by top-performing health care systems that treat a substantial number of patients of underrepresented races and ethnicities, by incentivizing patients’ safety and outcomes with an added payment rather than holding a small percentage of reimbursement for minimal safety measures.

Prioritize research training, career development, and capacity building. Government agencies, nonprofit organizations, and foundations play a key role in funding investigators in clinical trials and translational and implementation research. Although funding for health equity research has been increasingly prioritized, these efforts should be sustained and further developed to increase opportunities for targeted partnerships. Furthermore, a mechanism to apply a health equity lens during the review of research proposals must be developed and used to ensure the adequate representation of Black women as research participants and investigators as well as in leadership.

CONCLUSIONS

Black women are disproportionately dying of CVD. The overwhelming evidence documenting these disparities underscores the urgency to translate these findings into remediating actions. In designing solutions to address the inequities in CV health, careful consideration should be given to the ethnic diversity of Black women, the impact of SDoH, and the unique challenges that shape their health-seeking behaviors. Achieving health equity requires the collective effort of all stakeholders and a commitment to providing the best possible CV care for all as a fundamental human right. “The time is now!”

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