



Editorial

The Importance of Equity in Health Care

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The fight for equity in health care is everyone's responsibility. For those of us representing minority groups, we speak up to protect ourselves and those we represent. For those of us with privilege, we speak up to acknowledge the inequity of this privilege, the unacceptable history that travels with it, and the need to be a part of actively facilitating meaningful change. Conversations about equity and diversity are often difficult, polarizing, and hard to navigate—particularly when we discuss their impact on cardiovascular outcomes.

In the current issue of *JSCAI*, Epps et al¹ studied a 4078-patient cohort from the pooled PLATINUM Diversity study and PROMUS Element Plus postapproval study to address an important and novel question central to daily practice: how do sex, diabetic status, and ethnicity/race in combination influence outcomes for patients undergoing percutaneous coronary intervention (PCI)? The data came from 52 US sites with 1-year follow-up; 48% of the diabetic population was from minority groups, and 48% of patients with diabetes were women. Epps and her team found a disproportionately high risk of adverse outcomes for minority women with medically treated diabetes, reporting a doubling of major adverse cardiac event (MACE) rates compared to patients without medically treated diabetes and myocardial infarction (MI) rates 2.7 times higher than patients who did not have medically treated diabetes. Notably, no other group with medically treated diabetes (White men, White women, or minority men) showed an increased risk in MACE when compared with patients without medically treated diabetes. These findings remained significant after a multivariable risk analysis. For minority women with insulin-dependent diabetes, MACE and MI outcomes were even more disparate. Additional independent poor prognostic factors among diabetic patients included hyperlipidemia, renal dysfunction, and prior MI.

This study is an urgent call to action for all cardiologists. It contains important and timely messages that need to be addressed; however, more information is also needed to quantify the true magnitude of this outcome disparity. The most important single issue that the authors were unable to address is the rate of cardiac death among included patients; Epps et al could only access pooled all-cause death. The selection of a primary outcome is important when studying sex-based differences; hard clinical end points such as cardiac death and MI are

more robust in this setting. The selection of end points dependent on all-cause death or revascularization may unintentionally decrease our ability to appreciate the magnitude of sex-based outcome differences. Epps and colleagues do not provide cardiac mortality data separately, presenting only all-cause death as a secondary end point. In doing so, they potentially underestimate the outcome gap for minority women with diabetes.

At baseline, women have a longer life expectancy than men and women are less likely to die from a noncardiac death than men; therefore, the use of all-cause mortality end points risks concealing higher rates of cardiac death in women. Including target vessel revascularization in a composite end point is also potentially problematic. Revascularization is operator-dependent, and women are less likely to receive revascularization than men, even when presenting with acute coronary syndrome (ACS) and equivalent risk²⁻⁴; minority groups also receive lower rates of revascularization than white people.⁵ Other more detailed baseline characteristics were also unavailable, including classification of diabetes (type 1 or 2), duration of diabetes diagnosis, glycemic control, intravascular imaging, and completeness of revascularization. Although these limitations are acknowledged, this study presents critical data that we need to meaningfully address and builds on a large body of evidence that demonstrates health care inequity for women and people of color.

Numerous high-quality studies have established that significant disparities exist in the management of ACS for minority groups and for women. Black and Hispanic patients with ACS experience longer delays to treatment and outcomes when compared with non-Hispanic White patients.⁶ Women have marked disparities in treatment from triage to discharge and at every stage in their management during presentation with ST-elevation myocardial infarction, with higher subsequent rates of cardiac death, all-cause death, MI, and MACE.^{2,7} Outcomes for diabetic patients with ST-elevation myocardial infarction are significantly worse than those of patients without diabetes.⁸ The importance of reporting the impact of all factors in combination, as Epps et al have, should not be underestimated. For patients who are both women and from a minority group, barriers to equitable health care and outcomes can become logarithmic in their magnitude.

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This study highlights the importance of equity in health care. Ethnicity, gender, class, geography, sexuality, and disability are all factors that contribute to disparities in health care outcomes. This is no longer acceptable. It should never have been acceptable. It should never be acceptable again.

In the United States, a multitude of factors result in health care access disparity across different socioeconomic groups. There is a substantial wealth gap between White and minority families in the United States, and there is an outcome gap for Black and minority ethnicity groups that is undeniable.^{5,9} Treatment disparities for women with cardiovascular disease when compared with men have been repeatedly demonstrated.^{2,4,10,11} These disparities begin at risk assessment and remain through referral pathways, PCI treatment, rates of transradial access, intravascular imaging use, PCI outcomes, and follow-up care, including optimal medical therapy, potent P2Y12 use, and cardiac rehabilitation referral. Contemporary data clearly demonstrate differences in major cardiovascular outcomes across multiple disease states and pathologies based on demographic characteristic and social economic strata.^{10,12-14} Health care providers often have implicit biases that can lead to disparities in care for racial and ethnic minorities and women^{11,15,16}; the underrepresentation of minority groups and women in our workforce play a role in these outcome disparities.^{11,15-17} Other emerging underrecognized or undertreated risk factors like a pregnancy-related risks of preeclampsia/gestational diabetes may also play a role.

Epps et al elegantly demonstrate outcome disparities for minority women with diabetes. This study is the first to stratify outcomes in diabetic patients according to not only sex but also ethnicity/race. This is important as both groups are underrepresented in ACS randomized clinical trials. Racism and gender discrimination since the dawn of imperialism have eroded society. Reforms like the abolition of slavery and apartheid, and the civil rights and women's rights movements have facilitated important change, but the rate of positive change is now underwhelming. The Supreme Court's decision to overturn *Roe v. Wade* has demonstrated how rapidly and without warning legislative rights central to women's health can be withheld. Currently there is an unacceptable health gap in cardiovascular disease outcomes for women and for people who are not White. Minority women with poorly controlled diabetes experience multiple interconnected, overlapping barriers. These factors are not only limited to the direct consequences of poverty, which result in scarce health care access and the inability to buy medications, but also impact the perception of risk, and ultimately contribute to conscious and unconscious biases that lead to differing access to treatment from health care professionals. Kaplan–Meier curves from Epps et al also provide hypothesis-generating insights. Event rates for minority women with diabetes show a significant step up at 90 days, suggesting filling or nonfilling of 3-month prescriptions may play a role. This could be due to less insurance, more financial pressures, poorer access to follow-up care, or lower prioritization of care. Further research is needed to explain this observation.

Robust policies across health systems to eliminate bias are required, as is culture change within our hospitals and departments. Reforms like improving awareness of these disparities, addressing implicit bias by health care providers and health care systems, improving access to health care for minority groups, developing culturally appropriate interventions, and increasing diversity in our cardiology workforce will help to reduce these disparities.

Most importantly, it is crucial to improve health access and perception of risk among high-risk groups. Diversity and representation within the cardiology workforce are needed for all underrepresented patient groups. It is no coincidence that the people underrepresented within the cardiology workforce are those with the

poorest patient outcomes: women; Black/African Americans; Hispanic people; Native Americans; Alaskan natives; Aboriginal and Torres Strait Islanders; Māori; Pasifika peoples; rural patients; socioeconomically disadvantaged people; and gay, lesbian, bisexual, transgender, gender diverse, queer, and intersex people.¹⁷

We will all benefit from more equitable health care. It is easy to imagine this is someone else's problem. It is not. Progress has been too slow for too long. It is time for each of us to call for and facilitate meaningful change. The problem is ours to solve. The fight for equity in health care is everyone's responsibility.

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