From race-based to race-conscious medicine: how anti-racist uprisings call us to act

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The brutalisation of Jacob Blake and murders of George Floyd, Breonna Taylor, Ahmaud Arbery, Tony McDade, and countless others—coupled with horrifying statistics about the disproportionate burden of COVID-19 on Black and Brown communities—have forced the USA and the world to reckon with how structural racism conditions survival. Although clinicians often imagine themselves as beneficent caregivers, it is increasingly clear that medicine is not a stand-alone institution immune to racial inequities, but rather is an institution of structural racism. A pervasive example of this participation is race-based medicine, the system by which research characterising race as an essential, biological variable, translates into clinical practice, leading to inequitable care. In this Viewpoint, we discuss examples of race-based medicine, how it is learned, and how it perpetuates health-care disparities. We introduce race-conscious medicine as an alternative approach that emphasises racism, rather than race, as a key determinant of illness and health, encouraging providers to focus only on the most relevant data to mitigate health inequities.

Research in clinical medicine and epidemiology requires explicit hypotheses; however, hypotheses involving race are frequently implicit and circular, relying on conventional wisdom that Black and Brown people are genetically distinct from White people. This common knowledge descends from European colonialisation, at which time race was developed as a tool to divide and control populations worldwide. Race is thus a social and power construct, with meanings that have shifted over time to equate genetic ancestry, which could be meaningful when traced to a narrowly circumscribed population of origin (eg, Biafada people), with race (eg, African ancestry). On the wards, students learn that race is relevant to treatment decisions and have inadequate power to question the racialised assumptions of their supervisors. In this way, race-based medicine is quickly propagated.

Such racially tailored care might drive medical errors and increase health inequities. For instance, medical students who endorsed the false beliefs that Black patients had longer nerve endings and thicker skin than White patients also rated Black patients as feeling less pain and had longer nerve endings and thicker skin than White patients, and they might not be prescribed to Black patients with hypertension (table). We argue that such approaches are harmful and unnecessary, contributing to health-care disparities among the exact populations they are intended to help.

Emerging scholarship underscores the harms of these race-adjusted practices, even as some continue to defend them, touting their ability to capture yet-understood differences in clinical measures between racial groups. However, propagation of race-based medicine promotes racial stereotyping, diminishes the need for research identifying more precise biomarkers underpinning disparities, and condones false notions about the biological inferiority of Black and Brown people. Hence, even if significant findings or clinical anecdotes support the use of racially tailored practices, they should be rigorously critiqued and mediating variables, such as structural conditions, should be analysed accordingly.

Many medical students enter their training with racial biases that are unconsciously reinforced. Race is often learned as an independent risk factor for disease, rather than as a mediator of structural inequalities resulting from racist policies. Health disparities are presented without context, leading students to develop harmful stereotypes on the basis of the belief that some populations are more diseased than others. Students learn to associate race with disease conditions, such as sarcoidosis, cystic fibrosis, hypertension, and focal segmental glomerulonephritis, which upholds their implicit understandings of race as a biological trait. Professors might misleadingly equate genetic ancestry, which could be meaningful when traced to a narrowly circumscribed population of origin (eg, Biafada people), with race (eg, African ancestry). On the wards, students learn that race is relevant to treatment decisions and have inadequate power to question the racialised assumptions of their supervisors. In this way, race-based medicine is quickly propagated.

www.thelancet.com Vol 396 October 10, 2020

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Lancet 2020; 396: 1125–28
tests also reduce the likelihood that Black patients can obtain disability support for their lung disease. These examples show the necessity of transitioning from a race-based system of clinical care to race-conscious practice. Adopting the language of race-conscious policy, we provide the following recommendations for race-conscious alternatives.

First, racist, racially tailored practices that propagate inequity should be avoided. Race should not be used to make inferences about physiological function in clinical practice. Race-adjusted tools should be abandoned or replaced with more precise analytics than currently used. For instance, the health systems of the University of Washington, the University of California San Francisco, the Beth Israel Deaconess, and the Vanderbilt University eliminated the race-correction for eGFR. Clinical teams should reconsider the use of race in the opening sentence of an encounter note and instead consider including relevant indicators of structural vulnerability (eg, Spanish-speaking woman aged 41 years instead of Black woman aged 41 years). Race should be used to assess for experiences of discrimination and refer to affinity-based

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Examples of race-based medicine were chosen to represent multiple racial groups (eg, White, Black, Asian) and domains in which race is essentialised as biological (eg, pharmacokinetics, bone density, lung capacity). ACE=angiotensin-converting enzyme. ASCVD=atherosclerotic cardiovascular disease. BMI=body-mass index. CKD-EPI=Chronic Kidney Disease Epidemiologic Collaboration equation. eGFR=estimated glomerular filtration rate. FRAX=fracture risk assessment score. JNC 8=Eighth Joint National Committee. PFT=pulmonary function test. UTI=urinary tract infection. 

Table: Examples of race-based medicine, the potential harm to patients, and race-conscious alternatives.
support services. Second, it should be taught that racial health disparities are a consequence of structural racism. Beginning in preclinical education, racial disparities in disease should be explained within the framework of the structural determinants of health, defining race as a social and power construct. Awareness of institutional inequities as a root cause of ongoing racial injustice promotes structural competency in clinical practice. In addition, phenotypic race should be distinguished from genetic ancestry and students should be discouraged from narrowing differential diagnoses and management on the basis of perceived race. Third, resolutions denouncing race-based medicine across clinical leadership should be adopted. Effective action to eradicate race-based medicine will require cooperation across clinical leadership, including those professional societies responsible for setting practitioner standards. Societies for health-care practitioners should consider resolutions denouncing the use of race-based medicine in their training guidelines, and other publications, and require that race be explicitly characterised as a social and power construct when describing disease risk factors. Black, Indigenous, and other people of colour should be included in (and rewarded for their contributions to) decision making processes to reform disease management guidelines. Some forward-thinking societies have already made strides to advance such resolutions. Finally, clinical research should be used to examine structural barriers, rather than using race as a proxy for biology. Clinical journals should include in their publication guidelines instructions to avoid the use of race as a proxy for biological variables, such as genetics, pharmacokinetics, and metabolism. Hypotheses using racial labels should make the authors’ definition and operationalisation of race explicit. Additionally, structural barriers to health that overlap with race should be considered, including socioeconomic status, discrimination, transportation, environmental exposures, criminal history, documentation status, English proficiency, and neighbourhood violence. Models and measures of structural racism that account for policy influences can be developed and used to assess health impacts, rather than solely including race as an independent variable.

Our multi-pronged, race-conscious approach seeks to reform race-based medicine across clinical practice, education, leadership, and research (figure). These recommendations aim to promote conscious, anti-racist practices over unchecked assumptions that uphold racial hierarchies. In doing so, medicine can make substantial strides toward achieving health equity.

Health care is merely one institution plagued by structural racism: a comprehensive antidote to racial health disparities will require collaboration across sectors of housing, education, transportation, criminal justice, and environmental justice. We should encourage health-care practitioners to leverage their cultural capital to advocate for antiracist policies. Through conscious effort and collaboration, health-care providers can work towards racial equity within and beyond the walls of examination rooms.

**Figure: How race-based medicine leads to racial health inequities**

An alternative approach to race-conscious medicine, defined as medical practice and pedagogy that accounts for how structural racism determines illness and health.

### Race-conscious medicine

- Race defined as a social and power construct
  - Effects of structural racism analysed
  - Consequences of racism on health taught
  - Support provided to overcome structural barriers to health
  - Reduction in racial health inequities

### Race-based medicine

- Race ill-defined and inferred to have biological significance
  - Epidemiological and clinical studies link race with disease
  - Racial groups understood as inherently diseased
  - Health-care bias and stereotyping
  - Racial health inequities

**References**


**Contributors**

JPC and MVP conceived the idea of this Viewpoint and prepared the original manuscript draft. JT contributed to manuscript revision. JPC prepared the final version of the manuscript with input from MVP and JT.

**Declaration of interests**

We declare no competing interests.

**Acknowledgments**

JPC and MVP are supported by the Robert Wood Johnson Health Policy Research Scholars Program. JPC is supported by the National Institutes of Health Medical Scientist Training Program Grant T32GM13665.