



## AMA Journal of Ethics®

January 2023, Volume 25, Number 1: E72-78

### MEDICINE AND SOCIETY: PEER-REVIEWED ARTICLE

#### How Does Racial Segregation Taint Medical Pedagogy?

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##### Abstract

Persistence of racial segregation makes equitable health care impossible for African Americans, as does the supra-geographic segregation perpetuated by enduring racial medical mythologies that remain unchallenged in health professions education. This article canvasses how these mythologies exacerbate myopia in health professions practice and education, maintain barriers, and perpetuate racial health inequity.

##### Codifying Racial Segregation

In 1870, the American Medical Association (AMA) twice excluded<sup>1</sup> the racially integrated delegation from Washington, DC, to the AMA's national meetings while admitting a White one.<sup>2</sup> Between 1846 and 1910, the AMA developed a state-based organizational structure that excluded most African American physicians even as the association shaped medical education.<sup>2</sup> Schools commonly rejected Black medical aspirants like James McCune Smith, who moved to Glasgow, Scotland, where he earned his medical degree in 1837,<sup>3</sup> and Daniel Laing, Isaac Snowden, and Martin Delaney, who were admitted to Harvard Medical School in 1850 but were expelled when White students protested.<sup>4</sup>

African American physicians responded by founding their own societies<sup>2,4,5</sup> and medical schools because the relatively few Black patients admitted to White hospitals were typically pressed into service as “teaching material” and research subjects.<sup>6</sup> When the AMA decided to elevate medical education by creating the Council on Medical Education in 1904, it did not essay to treat the 9 million underserved African Americans in the South.<sup>2</sup> Instead, the AMA Council commissioned the Carnegie Foundation for the Advancement of Teaching to evaluate American medical education and produce the 1910 **Flexner Report**, which recommended closing all but 2 of 7 African American medical schools—Howard and Meharry.<sup>7</sup> Moreover, the report castigated African American physicians—already denigrated as purveyors of drugs, alcohol, and abortion<sup>8,9</sup>—as “limited,” declaring: “A well-taught negro sanitarian will be immensely useful; an essentially untrained negro wearing an M.D. degree is dangerous.”<sup>7</sup> Five of the 7 schools closed, and the number of African American physicians plummeted, ensuring that Black patients' needs remained unmet. A lingering consequence today is that only 5% of US physicians are Black.<sup>10</sup> And though African American men, who have

the nation's lowest life expectancy, fare best when cared for by Black men physicians,<sup>11</sup> Black men constituted just 2.9% of medical students in 2019.<sup>12</sup>

As the civil rights era dawned, African American physicians advocated for Medicare and Medicaid legislation that the AMA disparaged as “socialized medicine.”<sup>13</sup> The AMA's long-standing resistance to these programs included distributing pamphlets to members declaring that “Help should be given to those who need it but not to those who are able to take care of their own needs” and warning that such governmental insurance programs “would result in the overcrowding and overutilization of hospitals by those who could be better cared for at home.” Other AMA promotional materials asked: “Would socialized medicine lead to socialization of other phases of life?”<sup>14</sup> As I have noted elsewhere, it was Medicare that “enforced hospital desegregation via the 1964 Title VI of the Civil Rights Act, but de facto segregation and bias lingered, even in the North.”<sup>15</sup> De jure **segregation** ended without support of the AMA.<sup>2</sup>

### Contemporary Segregation

As Nancy Krieger and colleagues have shown, segregation still dictates many African Americans' health status.<sup>16,17</sup> Black women born in segregated states are more likely than those born in nonsegregated states to have estrogen receptor-positive breast cancer,<sup>16</sup> yet clinical education is largely silent on this and other significant health effects of discrimination.<sup>17,18</sup> Moreover, utilization of racial genetics in medicine ignores its role as an extension of biological dimorphism promulgated by 19th-century scientists<sup>6,19</sup> to support African American racial inferiority. In 2005, for example, isosorbide dinitrate/hydralazine was approved by the US Food and Drug Administration to treat congestive heart failure in African Americans only, based on a theory of racial genetic vulnerability.<sup>20</sup> The drug's adoption continues centuries of medicine's espousing biological dimorphism to support the claim that Black and White Americans suffer different diseases and require different treatments.<sup>6,21</sup>

Despite habitually being treated as a biological category, race is a social construct, one that medical texts address in a profoundly illogical manner. Research papers, textbooks, and lectures treat racial groups as a significant patient descriptor even as they fail to define terms like *African American*, *Black*, *White*, and *Hispanic/Latinx*. Medical discourse may fail to address ethnicity in a nuanced way, as when Black and White categories are set in opposition to broad Hispanic labels that ignore the fact that Hispanics are members of an ethnic group whose composition varies widely and whose members can identify as multiracial.<sup>22</sup> Moreover, texts and lectures can stress race as a social construct even as prominent and consistent use of race-based medicine sends a very different message to students, as it serves to reify race.<sup>23</sup>

Medical education is relatively silent about clinical guidelines that deploy race to assess everything from treating urinary tract infections in infants<sup>24</sup> to the advisability of vaginal birth after caesarian section.<sup>25</sup> For example, the American Heart Association's Get With the Guidelines–Heart Failure Risk Score predicts the risk of death in hospitalized patients but adds 3 unexplained additional points to any “nonblack” patient, thereby categorizing all Black patients as lower risk<sup>26</sup> (and therefore less likely to receive aggressive care<sup>27</sup>). Similarly, equations used in estimating glomerular filtration rate (eGFR) add a point or more to the eGFR of Black patients, suggesting that Black patients have better kidney function.<sup>26</sup> Use of these tools results in denying procedures to African American patients.<sup>26</sup> Thus, **tailoring treatment to race** remains a powerful part of medical

education that in some instances prevents African Americans from receiving treatment, just as barring the doors of hospitals to Black patients once restricted their care.

### **Pedagogical Silence as Iatrogenic Harm**

“The maxim is ‘*Qui tacet consentit...* Silence gives consent,’” wrote Robert Bolt in *A Man for All Seasons*.<sup>28</sup> Medical pedagogy’s silence—its failure to address persistent mythologies that threaten the health care of African Americans—gives stigmatizing beliefs credence and inflates health care disparities by barring access to treatment. A legion of beliefs—such as that African Americans’ bodies differed so dramatically from White people’s that they did not feel pain<sup>29</sup> and were immune to killers like heatstroke and yellow fever—supported enslavement<sup>30,31,32,33,34,35,36</sup> and the yawning chasm between White and African American health profiles.<sup>6,37</sup>

Today, the same mythologies persist to hobble the health care and health status of African Americans. For example, a 2016 study documented that more than half of all medical student respondents and most resident physicians still believe that African Americans do not feel pain as White patients do and that they have “thicker skin” and “stronger bones.”<sup>38</sup> These myths are not inscribed in medical textbooks, so it is likely that students are taught them on clinical floors as they frequently observe African Americans in pain being dismissed as drug seeking and sent away without analgesia. Such neglect is exacerbated by stigmatizing language in medical charts, which is 2.5 times as likely to be found in the records of Black patients as White ones.<sup>39</sup>

Resurgence of both biologic dimorphism and blame-the-victim theories during the COVID-19 pandemic took the form of putative genetic differences.<sup>40</sup> The surgeon general’s invoking alleged behaviors—such as drug and alcohol use, obesity, and failure to practice social distancing<sup>41</sup>—to explain African Americans’ high rates of infection and death<sup>42,43</sup> eclipsed discussions of documented risks to African Americans posed by environmental racism,<sup>44</sup> low rates of health insurance coverage, and a relative paucity of personal physicians.<sup>43</sup> At the same time, medical journals and news media decried African Americans’ shunning of COVID vaccine trials while invoking the imaginary primary or even solitary role of the 1932-1972 US Public Health Service Study at Tuskegee (in which the US Public Health Service withheld standard-of-care antibiotic treatment from hundreds of Black men in Alabama who had been diagnosed with syphilis) in buttressing a purportedly widespread African American aversion to research and vaccination.<sup>45,46,47,48</sup> Actually, 4 centuries of medical abuse, not overreaction to a single study, has fomented some African Americans’ resistance to a variety of research and treatment initiatives.<sup>49,50</sup> However, the frequent claim that African Americans shunned the COVID trials en masse is fictitious.<sup>51</sup> The real culprits that prevented nonelderly people of color from receiving vaccines were health policy decisions, such as prioritizing the elderly and health care and high-status workers<sup>52</sup> but not the essential workers earning low wages who often shared their risks.

### **Conclusion**

Racial segregation, both de jure and de facto, has powerfully separated African Americans from equitable health care. But so does the extra-geographic segregation perpetuated by persistent racial medical mythologies. To achieve more equitable care without racial bias, medical curricula should actively correct errors not only in texts but also in clinical teaching and modeling. Correcting the history of medicine canon to identify disparate treatment, abuse, and erroneous beliefs is an important step that has already begun in texts such as *Fatal Invention: How Science, Politics, and Big Business*

*Re-create Race in the Twenty-first Century*,<sup>53</sup> *Medical Apartheid: The Dark History of Medical Experimentation on Black Americans from Colonial Times to the Present*,<sup>6</sup> and *Medicine and Slavery: The Diseases and Health Care of Blacks in Antebellum Virginia*<sup>34</sup> and within inclusive curricula.<sup>54</sup> Expanding this education will equip students to interrogate racial bias in patient care and policies.

The COVID-19 pandemic has thrown the overreliance on biological dimorphism and the prevalence of blame-the-victim theories into sharp relief. Clinicians must eschew these and allied clinical stances, such as the belief in disparate pain sensitivity and the reliance on racial algorithms. But correcting these stances and beliefs should extend to frank indictments of them for the benefit of students and healers in training.

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#### Citation

*AMA J Ethics*. 2023;25(1):E72-78.

#### DOI

10.1001/amajethics.2023.72.

#### Conflict of Interest Disclosure

The author(s) had no conflicts of interest to disclose.

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ISSN 2376-6980