

WTE of October 22, 2015: “We are all one race”

CST of October 24, 2015: “Race and the practice of medicine”

We now know once and for all that race is not a biological phenomenon but a social construct. The Human Genome Project, completed in 2000, established that, genetically, all of us human beings are more than 99.9 percent the same. When the project was completed, geneticist Greg Venter stated that the accomplishment illustrates that “the concept of race has no genetic or scientific basis.”

Astoundingly, racial and ethnic categories have appeared in the patents of gene-related biomedical patents. Drug firms increasingly target “ethnic niche markets” for drug development, promotion, and sale. That’s partly because the National Institute of Health Revitalization Act of 1993 mandates the use of census racial categories. The Food and Drug Modernization Act of 1997 also strongly encourages these outdated practices. The complexities of patent laws add to the problem.

These facts are thoroughly examined in Jonathan Kahn’s “Race in a Bottle.” (He means pill bottle.) Kahn begins with “the story of BiDil.” In the 1980s, BiDil as a drug for everyone; it became racialized “primarily in response to an FDA ruling that placed in jeopardy the value of its owner’s original nonracial patent.”

Soon the commercial aspect of promoting the drug became center stage. Often African Americans are held to white norms, yet health disparities would be more aptly compared to other underserved groups, such as recent immigrants.

Kahn also examines the misconceptions that persist to today. For example, haven’t we all heard that sickle-cell anemia in the US is a uniquely African-American affliction? “Historically, sickle cell is perhaps the most powerfully radicalized genetic condition in the United States, where it is invariably cast as a ‘black’ disease,” writes Mr. Kahn.

Sickle-cell anemia impairs a person’s red blood cells’s capacity for oxygen. A “carrier” of the sickle-cell trait has one copy of the gene; individuals with the actual disease have two copies. People with the trait—with the copy of one gene—do not manifest any ill health; indeed, the trait offers some protection against malaria.

In the United States, about one in twelve African Americans carries the trait, “but the trait most emphatically is not exclusive to blacks or Africans.” Rather, it is an artifact of populations descended from regions in the world with high incidents of malaria. West Africa is one such region, but so are Greece and Sicily. Certain Arab and Asian-Indian populations carry the trait also; yet it is rare among South African blacks. Kahn suggests that, had the transatlantic slave traders raided the shores of Greece instead of West Africa, today we might characterize sickle-cell anemia as a “Greek” disease. Alternatively, if southern Africa rather than West Central Africa had been the focus of the slave trade, today’s descendants of those original enslaved Africans “would likely have no higher prevalence of sickle-cell anemia than most Americans descended from Europeans.”

When using race in medical practice, he writes, what matters are the economic, political, and environmental conditions as they relate to social identities. For example, African Americans suffer from disproportionately high rates of hypertension, but Africans in Nigeria have the world’s lowest hypertension, “far lower than the overwhelmingly white population of Germany.” 85,000 subjects from around the world participated in the hypertension study, which concluded that “these data demonstrate that the consistent emphasis given to the genetic elements of the racial contrasts may be a distraction from the more relevant issue of defining and intervening in the preventable causes of hypertension, which are likely to have a similar impact regardless of ethnic and racial background. Once the problem of ethnic/racial contrasts is characterized more closely as a special instance of environmental influences at the population level, it could become more tractable in both the realms of research and practice.”

The author quotes from another journal that found that “in the genomic era, conventional racial/ethnic labels are of little value.”

That does not mean that medical practitioners should ignore race, says the author; however, any label must be used with caution. "It's always important to understand that race itself is not an inherent causal factor, and that race is itself a socially constructed term, not a biological reality."

Modern biomedical research, practice, and product development fail to understand the potential to reify race as genetic and to reinforce stigmatizing racial stereotypes. The author is incensed that the racialized territory of biotechnology patents are creating "a new segregated genome, with racially identified neighborhoods whose value is being appropriated and exploited in capital markets."

A capitalist approach obscures the health-care disparities suffered by minorities. Because of the re-instituted (albeit antiquated) racial categorizations, problems that are largely social in origin are in danger of being framed as entirely the individual's responsibility.