Riddle Me This — The Interplay between the Social and Biology Constructs of Race


In “Racial Profiling in Medical Research,” Robert S. Schwartz, MD, argues that unless we can show a causal relationship between skin color and drug efficacy, we need to stop explaining how well drugs work in relationship to the skin color of the people who are treated with them. Schwartz argues that managing medical care based on skin color defies what we’ve been taught by biology and genetics while opening the door to inequities in medical care.

In “Racial Differences in the Response to Drugs – Pointers to Genetic Differences,” Alastair J. J. Wood, MD, argues that if sorting by skin color reveals useful information about drug efficacy, we must use the information in two ways. We should use skin color to manage our biomedical research enterprise if doing so allows us to quickly identify more specific therapies. We should use skin color to manage medical care if it helps physicians make better treatment recommendations.

Schwartz and Wood were provoked to write their dueling editorials by reports on the metastudies of the cardiac drugs Carvedilol and Enalapril. The studies looked at how patients, grouped by their skin color, responded to the two heart medications. One study concluded that Carvedilol’s benefits could not be predicted based on a study participant’s skin color. The other study concluded that knowing a participant’s skin color helped predict whether treatment with Enalapril would be beneficial.

Schwartz’s argument, that without a proven causal link between skin color and drug efficacy, we should stop explaining how drugs work in relationship to the skin color of people who participate in drug studies, is anchored in a long-standing, widely held concern about using race as a biology construct. Schwartz offers two examples to support his sense that this concern is gathering momentum. In a 1999 position paper, the American Anthropological Association states, “human populations are not unambiguous, clearly demarcated, biologically distinct groups.” In 2000, the prestigious journal *Nature Genetics* adopted a publication standard that requires contributors who want to make claims like those made by the investigators in the Carvedilol and Enalapril metastudies to explain first “why they make use of particular ethnic groups or populations, and how classification was achieved.”

Schwartz and Wood didn’t introduce me to the problem of race as a biology construct. I have my own track record of saying that in the absence of discrete, biologically distinct populations, race is one of those empty terms that we could do without. Schwartz’s recommendation, that all biomedical journals adopt policies similar to the one adopted by *Nature Genetics*, is an extension of my argument, and I endorse it.

In his editorial, Wood accepts Schwartz’s challenge, and in a clever way proves that race, as he uses it, is a meaning-filled term. In order to argue that Wood’s clever way of making race meaningful is unsafe, I need an approach that demonstrates the negative consequences of applying a meaning-filled construct of race in the context of biomedicine. I call that approach the interplay between the social and the biology constructs of race.

Van den Berghe defined race as a social construct that relies on biological features to make social distinctions. According to this definition it is not actual biological realities that define race but the social significance that is attributed to those biological features.

In his editorial, Wood modifies the social construct of race to fit the context of biomedicine. According to his modified definition, it is possible for biomedicine to simultaneously use biological features associated with the social construct of race (e.g., skin color) to understand biological realities (e.g., differences in the way people metabolize medicine) and presume that the biological feature is not causally linked to the biological reality. Wood is saying that it’s practicable to embrace the form of the social construct of race without embracing the social construct itself.

Although their constructs of race appear to be variations on the same theme, Van den Berghe and Wood understand the context that race creates very differently. To Van den Berghe, race is a systemic social construct; to Wood, it is an instrumental biology construct. If Wood is correct, the race construct can be used to accelerate the pace at which biomedicine drills into the quanta of biology, and when that work is done the race construct, having served its purpose, can be discarded. I don’t believe that can be done, and I believe that Wood makes the case for me.

In the penultimate paragraph of his editorial, Wood attempts to clinch his proposal to use biological features associated with the social construct of race without embracing the social construct itself. He begins with the biology part of his argument. It involves the fact that drug receptors exhibit population-based, functionally important genetic polymorphisms. Then he moves to the crucial step of relating these genetic polymorphisms to biological features associated with the social construct
of race. Wood says, “The distribution of receptor polymorphisms differs among populations of different racial backgrounds. Such racial differences in receptor polymorphisms may contribute to...”

The social construct of race constantly reveals its presence in the words we choose when we talk or write about race stuff. In the preceding sentences Wood, a careful writer, is making an argument that hinges on the proposition that we can use the biological features associated with the social construct of race as pointers to genetic differences without attributing the genetic differences to the biological features associated with race. Given the stakes, Wood must have paid the closest attention to the words he chose to make the argument. Yet in the space of less than two sentences he does the very thing that he has assured us will never happen. What begins as an observable difference in the distribution of receptor polymorphisms among populations of different racial backgrounds immediately becomes “racial differences in receptor polymorphisms.” To me this is not a tiny slip-up, but rather a take-your-breath-away revelation of how insidious the social construct of race is.

At the end of his editorial, after arguing that by exercising care we can manage the risks of the social construct of race in lab settings, Wood offers a suggestion that illustrates in a broader way that when you play with the social construct of race you’ll cut yourself. Wood observes that lab scientists aren’t the only participants in the biomedical enterprise who can do good by getting close to the social construct of race. He says that physicians can also use biological features associated with the social construct of race to understand biological realities while respecting the presumption that the biological feature is not causally linked to the biological reality. Specifically he says the Enalpril metasudy will “allow physicians to make better judgments about the risk-benefit ratios of these treatments for their patients.”

According to J.M. Casas, “The terms race, ethnicity and culture are frequently used interchangeably in literature. However, to do so is both inappropriate and misleading.” The data that was analyzed in the Enalpril metasudy was collected in such an imprecise manner. The demographic information that was analyzed in the Enalpril metasudy was obtained by asking participants to self-identify as “American Indian, Asian, black, white, Hispanic, or other.” Casas would have recognized the potential of this clumsy mixing of race and ethnicity terms to be misleading. Wood did not.

The recommendation to use the Enalpril metasudy’s findings concerning a relationship between efficacy and skin color to make treatment decisions transforms the clumsy demographic data from just another example of how tricky race language is, into a potential cause of harm to patients. Imagine that a patient with dark skin color who came to the United States from New Delhi or Surabaya or San Juan has presented as a candidate for Enalpril treatment.

Imagine that a physician, perceiving this patient to be “black” (rather than Asian, other, or Hispanic), concludes that the patient is not a candidate for Enalpril. Mistakenly denying patients access to effective treatment is problematic. Allowing patients to be harmed by mistakenly injecting the social construct of race into the physician — patient relationship is a bioethics nightmare.

Wood recognized that as the biomedical research enterprise drills into the quanta of biology we may finally learn why individual patients respond differently to medications — why the standard dose that is effective for many patients, may have a toxic effect or no effect on others. Finding the answer to this question is the real work that lies ahead of us. Speculating about the riddle of race cannot do this work. Let’s do the work and leave the riddle to the social scientists.

Riddle me this. Riddle me not.

For further reading

Letters to the Editor
Postmarketing Clinical Studies—Research or Bribery?

To the editor:
I am very concerned about the increase in postmarketing clinical studies for various pharmaceutical agents that are a thinly disguised means to bribe doctors to prescribe various therapies. Doctors are offered monetary reimbursement for their “time” and asked to complete often very brief questionnaires concerning patient acceptance or other aspects of the treatment for the drug choices may be rationalized as either the better treatment anyway, or that the comparison treatments are so similar that no harm would come to the patient by the choice of the more lucrative drug. Sometimes patients may even be coerced to continue on the favored drug in order to complete the study. (Doctors are often paid for enrollment and then given...
additional payments, and even bonuses, for patients who complete the entire "study.""

This is a growing problem among primary care practices, as doctors are squeezed more and more by insurers and look for other means to boost their dwindling incomes. It is very close to outright bribery and ought to be condemned by medical associations. Instead, some medical associations have actually touted these types of studies as a way to increase practice incomes while providing good medicine for patients.

None of us can truly have two masters. Either clinical researchers have a primary allegiance to the research or to their clinical responsibilities to patients. There may be times when there is no visible conflict, but when the conflicts occur, to which will an individual physician be most devoted? Will it depend upon last month's receipts?

... [Two years ago, I wrote a letter to the *Journal of the American Medical Association* on this subject, in which I said]:

The conflict of interests which arises for physician researchers requires a great deal of thoughtful consideration in order to balance research goals and patient care. In fact, I believe each patient who becomes a clinical subject ought to have an independent primary physician providing medical care in the patient's interest apart from the research clinician who oversees their participation as a subject in medical experiments.

Acknowledging the inherent conflicts of interests is not meant as a criticism of any individual researcher, but may serve to increase the probability that the emphasis for each patient will be on medical care rather than medical science.

Most Sincerely,
Sharon Lee, MD