

BY MICHAEL S. VICTOROFF, MD

Medically, Race Means Nothing



The data from the 2000 census should give us a thrill of ambivalence. I'm talking about the part where they gave us more freedom to pick our race. The choices are now wider, but their value is narrower than ever, medically speaking.

Until 1997, we asked Americans to declare their membership in one of six races. They were, *White; Black; American Indian, Eskimo, or Aleut; Asian or Pacific Islander; Other race; and Hispanic origin* (of any race).

In 1997, the categories were reduced to five: *American Indian or Alaska Native; Asian; Black or African American; Native Hawaiian or Other Pacific Islander; and White*. As a racial choice, *Hispanic or Latino* was eliminated, but it was retained as an ethnic possibility. These five also are specified for data collection under the Health Insurance Portability and Accountability Act.

Last year, the option was added: "Check all that apply." And apparently, 2.4 percent of us (about 7 million people) enlisted in more than one tribe. Though undoubtedly more reflective of reality, this blurring reduces the already small medical value of designating race.

The Census Bureau reminds us: "These categories are sociopolitical constructs and should not be interpreted as being scientific or anthropological in nature." The operative principle here is, "not ... scientific." Not that the data aren't collected rigorously. It's just that these "sociopolitical constructs" aren't of much practical use in health care.

For public health purposes, race — along with more useful factors like ZIP code, income, education, and occupation — can be important to know. But, in ethics, I wonder if we might do better sticking closer to biology?

Because it is indistinct and unreliable, race

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has limited value from a biological perspective. It may have some weak physiologic validity, but primarily, race is like citizenship. Sure, there are correlates between citizenship and health. But nobody thinks citizenship is a medical condition. ("You might want to see a specialist about being Texan.") It's more of a social accident with health implications.

Plus, race becomes less relevant to biologists as DNA becomes increasingly understood. In the age of pharmacogenetics and genotechnology, we ought to dump this 18th century race stuff in the trash bin with phrenology. In place of race, two rubrics offer better value: genetic pedigree and ethnic identity.

Race vs. ethnicity

Genetic pedigree means, "What your DNA says about you." It's about as much as we can know about a human, from the standpoint of molecular biology. For physicians, this is as good as it gets. It will probably take another 100 years to understand DNA, but there's little doubt that the future of medicine lies along this helical path.

Ethnic identity is a whole other matter. It can be relatively invisible unless it contrasts with the ambient culture. Ethnicity correlates poorly with genetics, although it can sometimes provide clues. It can also influence therapeutics — for example, when religious preferences constrain treatment options, such as blood transfusion. Understanding ethnic variables is important for all practitioners and generally much more valuable than race alone.

Race, as the Census Bureau collects it, has little to do with either molecular biology or ethnicity. It isn't precise. Whether self-proclaimed or assigned by "experts" (like Nazis measuring the lengths of noses), race is mainly a political category. It can be relevant in discussions of social justice and disease risk, but extrapolating

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to the care of individual patients is treacherous.

More important to American medicine, neither genetics nor ethnicity has much to do with the major category, *white*. Who are these people, anyway? This category is almost just another *other*. Culturally, being *Caucasian* has little to do with a mountain range that most Americans could probably not locate on a map and have had no ethnic connection with in 5,000 years. Medically speaking, *white* is so heterogeneous (note the etymology) that it has limited clinical relevance. There aren't nearly enough shades of white in the census/HIPAA

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categories. Beta-thalassemia occurs among persons of Mediterranean ancestry; cystic fibrosis, in northern Europeans. But both groups are going to show up as *white* in the census.

DNA is what matters. To a doctor, what good is knowing that you're *white*? It's like knowing you are not Samoan. Being *white* says nothing reliable about your metabolism of fava beans, codeine, or lactose. It doesn't predict your risk of breast cancer, Tay Sachs, or Alzheimer's. It doesn't say how you react to methacholine, ethanol, or penicillin. When we want to know your medically relevant ethnic identity (like Ashkenazi Jew or Amish), *white* is no help.

A distinctive cultural and family heritage can be a factor in medical management. Adherence to traditional ways can have medical implications of diet, lifestyle, customs, and family structure. It might be worth soliciting this information through the census, via health appraisal surveys, and on insurance enrollment forms.

But tribal roots are relevant only for people who are observant of a set of beliefs and practices. They are too weakly associated with pedigree to draw medical conclusions about individuals. Though many tribes like to claim purity

of blood, history and science can quibble with this. One of the more delicate discoveries of the genetic age is the high incidence of mis-assigned paternity, which exceeds 10 percent in virtually every social group. This introduces even more uncertainty into self-reported statistics about race, in addition to adoption, ignorance, nondisclosure, and *other*.

Too broad a brush

My immediate family is Russian-surnamed American (politically Ukrainian at the moment, but we're not putting too fine a point on it since Chernobyl). But our ethnic and genetic composition is, proudly, whatever. My family surname is like that of many Americans: a book jacket, revealing little about content.

Historically, race just depends on how far back you want to go. Remember Maude (in that wonderful movie, *Harold and Maude*), telling Harold about people, "After all, they are my species..."? Some of my people say they hail from Eden. Others would trace their origins to clay. Maybe the 2010 census should ask, "Which god created your mitochondria — Prometheus, Brahma, Changing Woman, Amaterasu, Ishtar, Yahweh, Oduduwa?" (Or *other*?)

If we're serious about tracing heredity, we need genetic profiles. Why not ask for DNA in the next census? Wouldn't it help policy makers to know our genes, explicitly? This project is under way in Iceland, where we're about to have the world's first population totally categorized and recorded right down to its base pairs.

In the future, I hope to see better focused and meaningful categories on our more sophisticated health questionnaires, besides the five traditional races. I suspect there are thousands of valid medical risk groups. Maybe "Have you ever lived in Harrisburg?" will someday be a critical risk factor in all sorts of pathology.

Ultimately, I'm more concerned with geneticists tinkering with species identity than whatever they learn about racial identity. I hope the way we've dealt with race throughout human history won't be a precedent for how we'll deal with *homo-whatever* when they appear. **MC**