

Notes on “Race, racial bias, and health care”

In Vaughn’s chapter, read pp. 725 – 727 (just the paragraph that ends on p. 727) and the “Health disparities and race” section on pp. 731 & 732.

In Kanj et al.’s “Rethinking the role of race in lung function,” read from the beginning of the article to the end of the first column on p. 1549.

In col. 1 on p. 726, Vaughn quotes Golash-Boza who writes, “There may be genetic differences between Kenyans and Swedes, but the genetic variations within the Kenyan population are actually greater than those between Swedes and Kenyans.”

Notice first that Golash-Boza is not using the concept *race* here, which she has explained earlier in the quote is a socially constructed idea. There still are, however, populations (which are perhaps even smaller than all Swedes and all Kenyans) that share the same ancestry—assuming that people haven’t moved around too much, which in many cases will be a faulty assumption.

So, in the sentence quoted above, the idea is that we are, first, comparing genetic variation among individuals within a population. So, if we randomly select 100 people in Kenya (who are all, let’s say, people whose families have always been in Kenya), we’ll find genetic variation for a wide range of traits: height, build, sex, how various nutrients are metabolized, blood type, a range of immune system functions, and so forth. If we do the same for 100 randomly selected people in Sweden, we’ll find the same. **This is the genetic variation *within* a population.**

Next, we switch from comparing individuals with a population to comparing the two populations. Now, we care about the genes (or alleles) that are (1a) the same for all Kenyans and (1b) the same for all Swedes but (2) different for Kenyans and Swedes. These will be the genes for skin color and hair texture—and a little more than just this, but not much more. **Hence, there is some but very little genetic variation *between* populations.**

To recap,

(a) Everyone everywhere has almost all of the same genes (i.e., the exact same DNA)—like 99.9% identical. This is what makes everyone human beings.

(b) There is genetic variation within populations for a wide range of traits (e.g., height, blood type, various aspects of metabolism, etc.). This variation occurs within every population.

(c) There are genes (i.e., the DNA) that are the same for everyone in population A and the same for everyone in population B, but different for populations A and B (e.g., genes for skin color). The amount of these kinds of differences between populations A and B are small, however.

Some useful (but optional) information about spirometry tests can be found on these pages:

Pulmonary Function Reference Equations: A Brief History to Explain All the Confusion

<https://rc.rcjournal.com/content/65/7/1030>

Do you know how to interpret the results of your spirometry test?

<https://nuvoair.com/blog/do-you-know-how-to-interpret-the-results-of-your-spirometry-test>

Obstructive and Restrictive Lung Disease

<https://www.webmd.com/lung/obstructive-and-restrictive-lung-disease>