The Medical Students' Perspective of Health Disparities and a Raced Based Curriculum: Addressing Disparities in Medical Education

Article:
Henrietta O. Fasanya, Elizabeth P. Kwenda, Michelot Michel, and Donna M. Parker
The Medical Students' Perspective of Health Disparities and a Raced Based Curriculum: Addressing Disparities in Medical Education
J Appl Lab Med 2021;6:1 307-09. https://doi.org/10.1093/jalm/jfaa168

Guest: Dr. Fasanya is an MD PhD candidate at the University of Florida, College of Medicine.

Randye Kaye: Hello and welcome to this edition of JALM Talk from the *Journal of Applied Laboratory Medicine*. A publication of the American Association for Clinical Chemistry. I'm your host Randye Kaye. A 2020 report from the Institute for Healing & Justice in Medicine begins with the phrase, "Racism, not race causes health disparities." Until now education in the medical sciences has largely taught about race in the context of genetic and biological differences. In doing so, many believe that medicine fails to address social racism and the consequences that learned biases may have on patient outcomes. An opinion article in the January 2021 special issue of JALM on health disparities raises several issues of bias across the medical school experience. From standardized board examinations, to the interpretation of clinical laboratory results. The first author of the article is Dr. Henrietta Fasanya. Dr. Fasanya is an MD PhD candidate at the University of Florida, College of Medicine. Dr. Fasanya is our guest for this podcast. Welcome doctor.

Henrietta Fasanya: Thank you for having me.

Randye Kaye: So, let's begin with this question. How do you believe that biological, psychological, and social factors affect how race is taught in medical education?

Henrietta Fasanya: Race is defined as the grouping of humans based on shared physical or social qualities. For centuries, we've seen that medicine has perpetuated the idea that race is a biological rather than a social construct. Doctors have used the presence of diseases that are more prevalent in certain racial demographics such as higher rates of sickle cell anemia in black populations or higher rates of cystic fibrosis in white populations to support the continuation of race-based medicine. However, as a whole, we see that the increased incidence of chronic diseases and increased mortality from these diseases (specifically in minority communities and Black communities) is not based on a genotypic or a biological factor, but rather a social factor. Such as impoverished neighborhoods being sources of food deserts; these in turn leading to increased rates of obesity and hypertension. And in turn when we look at factors such as obesity in their correlation to increased rates of cancer, we see that it's more

of these social factors that are affecting health care. And that is not discussed in medical education, but it should be.

Randye Kaye: Alright, thank you, and certainly the availability and use of public health is part of the problem as well. So, how can we improve the ways in which we discuss race and health in medical education?

Henrietta Fasanya: So, we can improve how health and race are discussed in medical education by being proactive in changing aspects of race-based curriculum. For example, if we're including diverse patient populations in our lecture presentations, increasing the faculty and administration diversity, and in providing reading materials through books, such as books like *Medical Apartheid*, and providing forums to educate ourselves and to discuss how the medical system has disenfranchised racial communities. All of these factors can go into improving how race and health care are discussed in medical education. One thing that we've done at the University of Florida is established diversity liaisons. And these diversity liaisons are present in each of our medical school classes and they help to facilitate this process. This in turn also empowers the minority medical students to be involved in their medical education in this aspect of race and medicine, and it helps address the gaps of knowledge or injustices that they may see as medical students and provide a forum for them to be discussed, and provide strategies for ways in which that can be improved for future medical students.

Randye Kaye: Okay, it makes a lot of sense. So, I had heard one suggestion which would be to require prerequisite courses on race in America for any students entering medical school. So, how do you think this would impact medical education and medical practice? I mean, do you believe this would be effective?

Henrietta Fasanya: So, there's a quote by Theodore Roosevelt that says that "The more we know about the past, the better prepared we are for the future." I think that requiring courses on race in America will be very effective in improving medical education and practice because this will allow medical practitioners to understand more about the history of the communities that their patients are coming from. Specifically, the African American and minority patients. And this understanding of the history and how the medical community has played a role in disenfranchising these minority communities can help to bridge the gap of understanding for the medical practitioner and also for the patient. And I believe that understanding this history will help all parties to better address the health disparities that we see currently.

Randye Kaye: Alright, thank you. Now, let's talk about diversity amongst medical school faculty. Do you think that the presence or

absence of that diversity contributes to how race is being taught?

Henrietta Fasanya: Yes, I do believe that the presence of or in the absence of diversity amongst medical school faculty does contribute to how race is taught. So, most medical schools we know are in academic centers and these centers typically consists of physicians and lecturers who are predominantly White and Asian. And when these lecturers give presentations, they tend to give presentations from their own point of view. I can say personally I see that most of our lecturers have patient presentations and images that consists of White patients, more fair colored patients. And so, by increasing the racial diversity of faculty members, we will be able to initiate a conscious effort to provide wider diversity of clinical samples for disease presentations and images. Just by having that conscious presence of knowing that there are a variety of patients, the variety of clinicians also. We know that there are many studies that show that when minority patients are treated by minority physicians their outcomes are better. So, I think that that provides an untapped resource for us to learn about how these faculty members and these practitioners are able to have a greater understanding with their minority populations and how they're able to relate with their patients. So, that this can help, in turn, to increase our understanding for all clinicians on how to relate to minority patients. We also know that minority practitioners are at the forefront of challenging how race is used clinically. So, by increasing this faculty diversity, this will allow medical students to increase their understanding of how race is taught in medicine and how or even if race should be used in their clinical decision making.

Randye Kaye: Alright, thank you. Very interesting. One more thing. Finally, your article mentions the example of the race-based multiplier used by clinical laboratories and the equation to calculate the estimated glomerular filtration rate or eGFR from creatinine. So, can you explain why this long-standing practice might be inappropriate?

Henrietta Fasanya: So, the estimated glomerular filtration rate is used as a proxy to measure kidney function. The two equations used to calculate eGFR are the modification of diet in renal disease or the MDRD, and the chronic kidney disease epidemiology collaboration or the CKD-EPI. Both contained race-based corrections and these race-based corrections are based on the assumption that black patients release higher rates of creatinine due to a higher muscle mass. However, that hasn't been scientifically supported and these race-based corrections are based as race as a social rather than a biological construct. We know that these corrected values are guiding clinical decisions that contribute to the noted health

disparities that we see in chronic kidney disease. The race corrections cause African American patients to have higher rates of eGFR which in turn portrays better rates of kidney function than they may actually have. This is really problematic because we see that it delays referral for black patients to have access to specialized care and kidney transplants if needed. So, this also disproportionately increases the resources for their white patients or their white counterparts which further contributes to the health disparities we see in kidney disease. So, that's why we believe that this practice would be inappropriate to continue.

Randye Kaye: Alright, thank you. Very, very interesting and thank you for joining us today.

Henrietta Fasanya: Thank you so much. I really appreciate the opportunity to speak to your audience.

Randye Kaye: That was Dr. Henrietta Fasanya from the University of Florida, College of Medicine describing the article from the January 2021 issue of JALM entitled, "The Medical Students'; Perspective of Health Disparities and the Race-Based Curriculum: Addressing Disparities in Medical Education". Thanks for tuning in to this episode of JALM Talk. See you next time and don't forget to submit something for us to talk about.