Ethnic Disparities and Health Inequities in Oncology Care

CMEO Podcast Transcript

Edith Mitchell:

Hello, I'm Dr. Edith Mitchell, and on behalf of CME Outfitters, I would like to welcome you to today's educational activity entitled, “Racial and Ethnic Disparities and Health Inequity in Prostate Cancer Care.” Today's activity is brought to you by CME Outfitters, an award winning, jointly accredited provider of continuing education for clinicians worldwide and is supported by an educational grant from Johnson & Johnson Institute and the Johnson & Johnson Family of Companies.

Now let me introduce your faculty for tonight. Again, I'm Dr. Edith Mitchell. I'm Clinical Professor of Medicine and Medical Oncology in the Department of Medical Oncology, and Director of the Center to Eliminate Cancer Disparities. I am also Associate Director of Diversity Affairs at the Sidney Kimmel Cancer Center at Jefferson Health in Philadelphia, PA. I am also the 116th President of the National Medical Association. And joining me today is my colleague, Dr. Randy Vince, who is Assistant Professor at Case Western Reserve University and University Hospitals and Director of Minority Men’s Health at Color Men’s Health Center in Cleveland, Ohio. Welcome, Dr. Vince.

Randy Vince, Jr.:

Oh, thank you, Dr. Mitchell. It’s a pleasure to be here with you today.

Edith Mitchell:

Let’s start by reviewing the objectives for today’s session. After participating in today’s activity, clinicians should be able to understand and acknowledge the influence of bias, disparities, and inequities on prostate cancer care.

As you know, prostate cancer is the most common cancer among men in the United States and contributes to over 35,000 deaths annually. However, the incident and rate of death are much higher among Black men than in any other racial or ethnic group. Not only that, prostate cancer occurs about five years earlier in Black men than in other racial and ethnic groups in the United States.

So today we'll be discussing how historical acts have a present-day impact; reviewing the disparities of social determinants of health and the influence on prostate cancer death rates; reviewing the racial and ethnic disparities in prostate cancer continuum; and finally, discussing potential strategies to improve the current disparities. So, at this time, I present to you, Dr. Vince. Go ahead, Randy, please.

Randy Vince, Jr.:

Alright. Thank you again, Dr. Mitchell, and I appreciate the opportunity to be here to talk about such a critical issue. But one of the things I always like to do, because I know that as many people who listen to this, they might have no idea who I am because I'm still very early on in my career. And so with that being said, I like to give an introduction of myself and who I am so that way maybe people will know why these are issues that I not only study, but are issues that are very proximal to me and the man that I am today.

So as stated, I've recently accepted an assistant professorship at University Hospitals Case Western Reserve. However, before doing that, I completed a three-year fellowship in urologic oncology at the University of Michigan. While there, I also obtained a Master's in Computational Medicine and Bioinformatics. I served on a few societies, or excuse me, committees for the American Society of Clinical Oncology, mainly around increasing representation in medicine, as well as addressing social determinants of health.

In addition to the assistant professorship, I'm also the Inaugural Director of Minority Men's Health here at University Hospitals and at the Cutler Men's Health Center.

But before any of that, before any of the degrees or anything like that, I think it's important to say that I'm a Black man that's from West Baltimore. So again, while these are issues that I've researched, they're also things that I've lived through, and so they're extremely proximal to me in the man that I am today and shape a lot of my career ambitions and passions.

And so now that we got that out the way, I want to start by discussing how historical acts have a current day impact. And to do that, I think it's important to go all the way back to the times of slavery and discuss there and then progress from there.

So one of the things that is not mentioned often when it comes to slavery is that it was a major economic engine for our developing country. In fact, both Black and White citizens were enslaved together, and if you think about the brutal conditions of slavery, then you now can come to understand why many people, regardless of race, began to work together to escape. So there needed to be a divide drawn, and race was that divide. So what ended up happening was poor White people became overseers while Black people remained enslaved.

In fact, this also allowed people who are proponents of slavery to now have, quote, unquote, "biological justification for slavery." And we, again, have this concept of racialization that occurs. And within that, because race is a social construct, not a biological one, we end up with these ambiguous blood-fractioning laws, such as things like the one eighth rule. And it reminds me of this quote from the author, Ta-Nehisi Coates, in which he says, "Race is the child of racism, not the father." I think that accurately surmises exactly what we're talking about when we talk about the development and the creation of race itself.

Randy Vince, Jr.:

And so if we state that differently, then we would state that racism is the driver for the creation of race, not the other way around. And so as we move from slavery to post-Civil War era to Civil Rights era to where we are now, we've had countless laws and policies that have impacted what we now discuss as social determinants of health. Before I dive into the social determinants of health and disparities we see within them, I want to just define exactly what social determinants of health are. And so if you look at the Department of Health and Human Services' definition, they have a Healthy People 2030 Initiative. On it, they define social determinants of health as the conditions in the environment where people are born, live, work, play, worship, and age that affect a wide range of health functions and quality of life outcomes and risk.

Furthermore, they give examples of social determinants of health, which include things like racism, education, pollution, numerous others, and then they also break down social determinants of health into five different domains, and those domains are health care access and quality, neighborhood and built environment, social and community context, economic stability, and education access, and quality. And before we start talking about disparities within prostate cancer, specifically, I want to just touch on each domain so that our listeners are aware of some of the disparities that exist within each one of these domains within social determinants of health. And I'll start with health care access and quality.

Now, I'm sure the majority of the listeners that will hear us have this discussion are aware that Black patients are more likely to be underinsured or uninsured. In addition, compared to their White counterparts, they're less likely to receive the same quality of care and less likely to have preventative services or preventative medicine visits, thus accessing the healthcare system through emergency rooms rather than through a primary care physician. So that's health care access and quality.

I want to move on to neighborhood and built environment, and to discuss this, I'm reminded of a study that was published out in University of Washington, which they looked at pollution levels nationwide. And what they found is that pollution levels, not coincidentally, are highest in areas that are predominantly populated by people of color, specifically Black people. In fact, and I'll quote the author said, "The inequities we report are a result of systemic racism." Over time, people of color and pollution have been pushed together, not just in a few cases, but in nearly all emissions. And so when we talk about neighborhood environment and context, next, I want to go from pollution to food insecurity. We can couple this data with data from the USDA, excuse me, that shows that Black people are more likely to experience food insecurity. And now you can start to see how these disparities within social determinants to health are interconnected and stretch across multiple areas of our daily lives.

So the next domain was social and community context, and to describe this to listeners, what I want you to think about is the fact that violent crime and poverty are linked. To state that another way, as poverty increases within a community, so do the rates of violent crime. And this in itself can be a potential stressor and have deleterious impacts on our patients' daily lives and health. And if it's hard for a listener to understand this, just close your eyes and think about the fact that if you are a teenager growing up in an underserved area that is high in poverty, high in violence… How many times do you need to see someone that you care or love beaten, robbed, stabbed, shot, even potentially murdered before you start to wonder, "Am I next?" And even with that, think about that proverbial monkey that it puts on your back on a daily basis, and now you can start to see why this is a potential stressor and could have deleterious impacts on patients in terms of their health.

Edith Mitchell:

I'd like to ask you a question now, Dr. Vince.

Randy Vince, Jr.:

Yeah, thank you.

Edith Mitchell:

There are studies showing that for follow-up of prostate cancer screening, that for Black physicians, there is a better follow-up by patients regarding recommendations, and it's recognized that there's a shortage of Black physicians in this country when you think about African Americans make up about 13% of the population in the United States.

Randy Vince, Jr.:

Yes, ma'am.

Edith Mitchell:

However, for physicians, it's less than 5% for practicing physicians, and for specialists and sub-specialists, that number is even lower than 4%. So what are your ideas about the shortage of Black physicians and how that plays a role in prostate cancer health care?

Randy Vince, Jr.:

So that's actually something that is shown in the data, like you said, in terms of the quality of care that's received and the perceived quality of care that is received from patients. So it's not just within prostate cancer. It's across multiple diseases or specialties, should I say. The role of representation in medicine is crucial, not only to the issues that you just touched on in terms of receipt of care, the quality of receipt of care, the follow-up, the feelings of trust, because we cannot negate ...

Even though within social determinants of health, it's not something that we directly discuss, but trust in the medical system is something that is also lacking amongst a lot of Black patients and Black people across this country, not only because of historical acts, but are also because of how they perceive that they're not listened to when they actually do have a doctor's appointment. And so for all of these reasons, like you said, the dearth of representation when it comes down to Black people in medicine impacts those various aspects. And so that is part of a number of recommendations in my eyes, or a number of thoughts in my eyes, that would actually help improve some of these disparities that we discuss.

Edith Mitchell:

Thank you.

Randy Vince, Jr.:

Absolutely. So if it's okay, I think I would like to just round out the discussion around the disparities within social determinants of health before moving directly into prostate cancer and the disparities that we see along the prostate cancer continuum. So there were two other domains that I just wanted to touch on. One is economic stability. So, again, what we see is that there is a history of policies like redlining that people discuss that ended up resulting in housing segregation. And so not only was it a lack of home ownership, but now a lot of communities have a lack of home ownership, but also increasing numbers of home vacancies. And with that comes along increased poverty.

And so the way that I like to try to think about this and break it down for a lot of people who might not think about these things on a regular basis is when you have an increase in home vacancies, it drives down the property value of that neighborhood. And so if I live in a neighborhood, my property value for those who have knowledge of real estate is dependent upon what we call comparables or comps. And so if there's an increase in the number of home vacancies, it drives down my home value, and the value of my home is how you assess property taxes. And so when you drive down the value of my home, you're able to assess less property taxes.

Those property taxes are used for a lot of areas to fund schools. So we end up with decreased school funding, and then you end up with these poor performance schools. And it's a vicious cycle, and ultimately, it leads me to the last domain, which is education, not accessing quality. And so given everything we just talked about, I think it should come as no surprise that data from the National School Board Association shows that Black students are more likely to live in poverty, more likely to attend high-poverty schools, and less likely to have access to things like internet. So I'll just stop there and see, Dr. Mitchell, if there's any other questions before I dive into the disparities that we have within prostate cancer.

Edith Mitchell:

So, Dr. Vince, let's talk about prostate cancer.

Randy Vince, Jr.:

Yes, ma'am. All right. So I think now that we've talked about this, we have a good framework for discussing the disparities within prostate cancer. And you mentioned some of these facts earlier in your introduction, Dr. Mitchell, but I just want to highlight some of them again before we go specifically within the continuum. So what we know is that prostate cancer has one of the largest racial disparities in oncology. Black men are approximately 1.6 times as high ... Excuse me, develop prostate cancer at 1.6 times higher rates than their White counterparts. And then again, there are disparities along the entire prostate cancer continuum.

So I think of it in screening, treatment, as well as outcomes when I talk about the continuum. And so we start with screening, and we know that data shows… There was a publication within *Cancer Epidemiology, Biomarkers & Prevention* in which they look at the demographic makeup of prostate cancer trials. And within the screening trials, which are how we develop our guidelines, we saw under-representation within the screening trials. So out of over 176,000 patients who enrolled on these screening trials, less than 3,000—excuse me, a little over 3,000—were actually Black men. So that's 0.5%.

Randy Vince, Jr.:

So again, this is how we develop our guidelines. And then there's also data that we could couple this with that shows that when you look at Medicare patients, and this was published in the *Annals of Internal Medicine*, that Black race and poverty are associated with lower rates of [prostate-specific antigen] PSA screening. And this is despite papers like the one I was fortunate enough to be on, that was led by my colleague, Dr. Jonathan Shoag, which we analyze the harm versus the benefit of prostate cancer screening. And so what we see is that since 2012, there has been a decrease in PSA screening, and this is partially due to the fact that the United States Preventative Services Task Force recommendation changed in 2012. But what we found is that prostate cancer screening is beneficial for all men, and Black men particularly benefit from prostate cancer screening.

So that's screening, and now I want to move on to the next part of the continuum, and that's treatment. So if we start with localized disease, these are patients who arguably benefit the most from definitive treatment for prostate cancer. And it reminds me of a study that was published by Moses et al, in which they analyzed over 300,000 men from the [Surveillance, Epidemiology, and End Results] SEER registry, and what they noted was that both Black men and LatinX men were less likely receive definitive treatment. And then, even further, there were racial disparities within receiving treatment, and those disparities were greatest amongst men with high-risk prostate cancer. So this is arguably the men with who would benefit the most from receipt of therapy, who were less likely to receive therapy compared to their White counterparts.

And that's localized disease. We see the same thing panned out within advanced disease. In a study that looked at SEER-Medicare data that analyzed treatment of men with advanced prostate cancer, they found that Black men were less likely to, oh, excuse me, less likely receive treatment. But despite having all of these anti-androgens and novel agents, they were more likely to undergo orchiectomy, which is not commonly as used as it was historically.

And that leads me to precision medicine. So when we talk about discussing the treatments for prostate cancer, we always want to discuss precision medicine because this is a new wave that is helping personalize care, but it might also be contributing to the disparities that we see.

In a study by a good friend of mine, Dr. Brandon Mahal, who's down at University of Miami, they looked at almost 12,000 patients across different ancestries in genomic testing, and what they found is that while there were some differences in gene expression across ancestry, that Black men were more likely to have to undergo multiple therapies before they had precision medicine testing. And again, this is to help direct their treatment. And even after the precision medicine testing, they were less likely to go on and proceed to clinical trials, which precision medicine actually helps us guide which men can benefit from being on clinical trials, especially within advanced prostate cancer, which is what this study looked at.

Then there's additional data, which is in nature genetics around genome-wide association studies [GWAS], which we use for calculating polygenic risk scores. And when they looked at these GWAS catalogs, what you find is that there's massive under-representation in individuals, specifically when you look at the representation of individuals included in these GWAS catalogs compared to the respective proportion of their ancestry or when it comes to the global population. But it's an over-representation when it comes to people of European descent, and so that's precision medicine.

Randy Vince, Jr.:

So we talked about treatment, we talked about precision medicine, and I want to just round out treatment by discussing clinical trials. And I'll refer back to the initial paper that we talked about that looked at demographic data across the prostate cancer clinical trials, and specifically hone in for that on treatment. And what they found is that they identified over 35,000 patients who enrolled in treatment-related clinical trials. And again, we saw a massive under-representation because only a little over 2,300 of those patients were Black.

And then to further the point that I'm making about the under-representation and the disparities that we see, I want to point to another article that was published in *Journal of Clinical Oncology* by a good friend of mine, Dr. Jan Sprat, and they looked at seven of the phase three random clinical trials that were used for FDA approval, specifically around novel agents and castrate-resistant prostate cancer. And so out of this—over 7,000 men that were identified—3.29% of those men were Black, and then out of all of the men that were enrolled in those studies, only 150 of them, the Black men, actually received the investigational treatment versus the placebo.

So again, we see these disparities stacking on top of each other from screening to treatment, and ultimately it impacts outcomes. And so I'll just touch on that as the next part of the prostate cancer continuum. And so if we look at prostate cancer in general, men with low-risk prostate cancer are not very likely to die from prostate cancer. And even within this low-risk population, we have studies like the one, again, that was published by Mahal et al, that shows us that even within this low-risk population, Black men are still more likely to die from prostate cancer. And SEER data shows us that Black men are approximately twice as likely to die from prostate cancers that White counterparts, and so these disparities, again, ultimately lead to Black men dying from prostate cancer more frequently.

But there's research out that has shown that in what we have in the [Veterans Affairs] VA is the closest to an equal access system in this country, and the study shows that while Black men coming into the VA system who are treated for prostate cancer may have had lower median income and lower rates of high school graduation in that study, they actually have better prostate cancer-specific mortality. And so despite us knowing that Black men have approximately 1.6 times the likelihood of developing prostate cancer compared to White men, we still see these disparities getting the prostate cancer continuum. So we have lower screening, lower utilization of precision medicine, lower rates of definitive treatment, and lower clinical trial enrollment. And all of these things end up leading to disparities within mortality of Black men for prostate cancer. And so before I move on to ways that I think we can move forward, Dr. Mitchell, is there anything in terms of questions or comments that you wanted to make?

Edith Mitchell:

No, I think you have addressed all of the major factors, and I look forward to your continuation. Please go ahead.

Randy Vince, Jr.:

Thank you, Dr. Mitchell. So the first thing I want to touch on in terms of ways forward is I think that we have to start to, as a society at large, accept that race is a social construct. The reason I say this is because I think about my medical training and I think about being in medical school and hearing discussions or lectures around prostate cancer and the disparities that exist within prostate cancer. And the way it was taught was if there was this Black man are just inherently born with these bad genes that cause these disparities. And if I'm being honest, I think this is a lazy and convenient way of ignoring many of the societal issues that we know exist that have a substantial influence on these disparities that we're discussing, and even more broader disparities within the rest of our daily lives. And so we have to accept races of social construct.

We have to acknowledge our country's history and how this has current-day implications on our social determinants of health. And one of the reasons I say this is because I think about a study that actually analyzed cancer mortality from 1950 to 2014, and what we found is that when you look at their study, cancer mortality in 1950 was actually lower for Black people than it was for White citizens. However, in 1953, [National Cancer Institute] NCI established its first clinical trial cooperative, and that led to the development of first chemotherapy. We've gotten better with how we screen, diagnose, and treat all cancers since that time, yet we've had an explosion in the difference in cancer mortality, and we are yet to have closed that gap. And with the discussion around social determinants of health, we need to collect variables specifically related to social determinants of health in our datasets because it is extremely difficult to design any, excuse me, initiative around closing and tackling these disparities without that data.

We talked about this earlier, but we absolutely must diversify medicine and increase representation. We need to perform multidiscipline research. No more researching things in silos. It needs to be across multiple disciplines, and I think we need to include our colleagues from epidemiology and other social sciences. And then I also think we have to have community outreach programs, community engagement where we can advocate, educate, and remove barriers for all citizens who live in the most underserved communities. And with that, I'll stop. It was definitely a pleasure having this discussion, and I'll take any questions you may have, Dr. Mitchell. But it was a pleasure having this discussion with you.

Edith Mitchell:

Absolutely. You did a phenomenal job in discussing this. There is a question I have, and that is regarding the number of practicing specialists and sub-specialists who are Black in this country, and the most recent data for cancer doctors, about 3% of cancer doctors are Black.

Randy Vince, Jr.:

Yes, ma'am.

Edith Mitchell:

And we really need to do something about that. I would certainly appreciate your opinion on some of the entities that may influence this ratio and the percentage of Black doctors in this country.

Randy Vince, Jr.:

Yes, ma'am. So Dr. Mitchell, you highlight an extremely crucial point. And even amongst urologists, Black urologists make up 2% of all practicing urologists. So again, it crosses multiple specialties. The other thing that I think we need to really highlight is the fact that a lot of our major medical institutions that are the most prestigious institutions actually reside in places where the biggest disparities exist. I think about my hometown of Baltimore, Maryland, and Hopkins is world renowned, but we have some of the most pronounced disparities within the city of Baltimore. And it doesn't matter if you're in Baltimore or Cleveland, Detroit, Philly, Philadelphia, you see the same thing, which points to more of a systematic issue than an individual issue.

Now, one of the things that I think we can do to eliminate that is to start these longitudinal pipelines and increase school fundings, and so I'm talking about starting at elementary school age kids, not waiting until we get those who battle through so many different adversities that are now in medical school and now trying to recruit a small number of overall students. I think we need to start much further upstream doing pipeline initiatives, investing in schools, and increasing exposure to the next generation to the field of medicine.

Personally, I think about my own experience. Being a physician was something that was so far-fetched to me when I was a child that it's not anything that I even considered when somebody asked me, 'What do you want to do when you grow up?' I thought it was more likely that I could become an athlete, if I'm just being honest. So I think that increased presence would absolutely go a long way in helping us improve the issues around diversity in medicine. It highlights one important thing, and this is a saying that I hold near and dear, "It's extremely hard to become something you never see."

Edith Mitchell:

Yes. So thank you so much, Dr. Vince, for your outstanding presentation today. And I'd like to summarize, as we end the program. First of all, disparities exist along the prostate cancer continuum all the way from diagnosis through treatment, clinical trials, precision medicine, and others. Treatment disparities increase as disease severity increase, with greatest in patients who are high-risk. What many people don't know is that we can identify some of the factors that put patients at higher risk of a decline, as well as death and mortality rates from prostate cancer. And these factors are not being utilized significantly as guidelines for treatment in Black patients. So we really need to make sure we are addressing the guidelines for diagnosis, precision medicine, and therapeutic intervention in Black patients.

Black men are more likely to go without treatment or genomic testing to identify which therapies might be best for the individual patient. So we need to make sure that we are using genomic profiling in order to define therapeutic interventions. And disparities along the prostate cancer spectrum result in disparities and cancer-specific mortality. So unless we get our patients into appropriate clinical trials where these entities are identified, we will see some of the similar results with time. So we want to make sure that Black patients are entered into clinical trials and that genomic profiling is utilized to specifically address issues.

Edith Mitchell:

So just to remind our audience that to receive CME or CE credit for today's program, please complete the post-test evaluation. You'll be able to download and print your CME certificate immediately on completion of the details. Lastly, please visit the CME Outfitter's Oncology Hub to access additional activities on relevant oncology topics and the Diversity and Inclusion Hub for discussions of disparities in health care, as well as there are resources there additionally for patient education materials. You can also follow us on Twitter @CMEOutfitters. Again, thank you, Dr. Vince, for your outstanding presentation and discussion. And thank you to our audience for your joining us today and participating in this program. Thank you and good night.

