

Racial and Ethnic Disparities and Health Inequities in Multiple Myeloma



CMEO Podcast Transcript

Edith Peterson Mitchell, MD, MACP, FCPP, FRCP:

Hello, I'm Dr. Edith Mitchell, and on behalf of CME Outfitters, I'd like to welcome you to today's educational activity, entitled Ethnic Disparities and Health in Inequities in Multiple Myeloma. Today's program is supported by an educational grant from Johnson and Johnson Institute and Johnson and Johnson Family of Companies. Today's activity is brought to you by CME Outfitters, an award winning jointly accredited provider of continuing education for clinicians worldwide. I want to encourage everyone to join us on our Twitter conversation at CME outfitters.

Edith Mitchell:

Now, let me introduce you to our faculty for today. Again, I'm Dr. Edith Mitchell. I'm Clinical Professor of Medicine and Medical Oncology in the Department of Medical Oncology and the Director of the Center to Eliminate Cancer Disparities and also Associate Director of Diversity Affairs for the Sidney Kimmel Cancer Center at Thomas Jefferson University Health in Philadelphia, PA. I am also the 116th president of the National Medical Association. Joining me today is Dr. Joseph Mikhael. Dr. Mikhael is Professor of Applied Cancer Research and Drug Discovery Division at Translational Genomics Research Institute, better known as TGen, and in... I'm sorry, Phoenix, Arizona. Going to move you to Philadelphia. Dr. Mikhael, he is also the Chief Medical Officer, International Myeloma Foundation in Studio City, California. Welcome Dr. Mikhael.

Joseph Mikhael, MD, Med, FRCPC, FACP:

Thanks so much, Dr. Mitchell. It's always a pleasure to join you and in particular to address such an important topic.

Edith Mitchell:

Absolutely. Many people don't recognize that myeloma is actually the most disparate of all cancers in terms of disparities. So let's start by reviewing our learning objectives for today's session. After participating in today's activities, clinicians should be better able to understand and acknowledge the influence of bias, disparities, and inequity on multiple myeloma care and will also have information regarding the treatment of myeloma that might offer some benefit. One of the things that we will want to do is make sure that we introduce some information regarding the treatment of myeloma as well as understanding the processes that result in disparities. So at this time, Dr. Mikhael, why don't you get started with your presentation?

Joseph Mikhael:

Absolutely. So I know that we'll be chatting back and forth here, but I think to sort of level set here, you made a very critical comment in your introduction around the notion that myeloma is one of, if not the most, disparate malignancy when it comes to the African American community. And what we mean by that is, as we're going to demonstrate sadly, that survival outcomes are roughly half in the African American community what we see in the white population. But-

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Edith Mitchell:

Oh, absolutely.

Joseph Mikhael:

... of course it's so much more than that.

Edith Mitchell:

Sure, absolutely. Not only are mortality rates higher in the African American population, but incidents rates as well more than twice that of other racial and ethnic groups in this country.

Joseph Mikhael:

Yeah. And that's what triggers the thinking around it and that's why I think myeloma is such an important area to discuss. It's not just a function of survival as you've said, but it really is... it starts with an incidence issue where the disease is really twice as common. And what we've come to appreciate, and when we look at the studies that we've done over years and large databases to appreciate it, that it's not only myeloma that disproportionately affects Black and African American patients, the pre-myeloma condition that we often call MGUS or monoclonal gammopathy of undetermined significance, which is a condition that is actually incredibly common, about 5% of all people over the age of 40 will have it. That is also twice as high within the African American community.

Joseph Mikhael:

So it appears that it's those precursor conditions... or that precursor condition that is so much more common. The transformation rate from MGUS to myeloma is approximately the same, but it does translate therefore into the incidents being twice as high within the African American population. So to give people a sense of numbers, right now in the US, roughly 14% of all people are of African American descent, somewhere between 13 and 14, but now myeloma has a representation of 20% of myeloma patients are of African American descent. So one in five myeloma patients in this country are of African American descent.

Edith Mitchell:

Oh, absolutely. And one of the earliest manifestations of myeloma is that of anemia. And unfortunately, many Blacks are told that all Black people have anemia so that doesn't mean anything. How about your discussion or comment on early manifestations of myeloma that are unrecognized and therefore many individuals who are Black have late and organ specific abnormalities. So tell us about myeloma and anemia, Dr. Mikhael.

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Joseph Mikhael:

Oh, absolutely, Edith, and I know you've introduced the topic so well. You've really hit on what I think is one of the major pieces of understanding the disparity. Epidemiologically, we've already said, it's twice as common than in white patients. Also, interestingly, the average age of diagnosis of myeloma, which is somewhere around 70 years old in general, is about 71 years old in white patients, 69 in Asian Americans, about 66 in the Black population and about 65 in the Hispanic population. So that is part of what you've described as people not recognizing myelomas early as we tend to think of myeloma as a disease of people in their 70s, but in fact we see a younger population of patients who are both Hispanic patients and indeed Black patients.

Joseph Mikhael:

But the other point that you make very clearly is when we think of the classic criteria historically of myeloma, that CRAB criteria we talk about, C-R-A-B, calcium elevation, renal insufficiency, anemia, as you've noted and bone disease, very often those things are unchecked, have gone on for a period of time before the diagnosis is made. Indeed, the average patient, independent of race and background, has three visits to their family physician with signs and symptoms consistent with myeloma before the diagnosis is made. But this is exacerbated within the African American population for many reasons. One of which is as you've noted, this sense that oh, anemia is just more common in this population, or interestingly, diabetes is more common in this population, and many of the signs and symptoms of myeloma overlap with diabetes. So patients are just told, "Oh, that little bit of the anemia you have, oh, that's just your diabetes," or "That little bit of renal insufficiency you have, that's just your diabetes. That peripheral neuropathy you have, that proteinuria you have..."

Joseph Mikhael:

And those key early signs and symptoms of myeloma end up being overlooked when in fact they are important for us to detect that this could well be multiple myeloma. And so that is why, one of the reasons why. Other reasons course include having access to diagnosis, lack of trust within the system, systemic racism. Many other things have reduced the ability for us to make an accurate and a timely diagnosis. But this is, I think, a really important piece for our audience to hear and understand that although the diagnosis is generally delayed in all patients with myeloma, because there's no one thing that makes a patient come in and say, "Hi, I have myeloma," with a sign on their head, but this is clearly prolonged even more so within the African American community.

Edith Mitchell:

Absolutely. And Dr. Mikhael, could you repeat the definition of CRAB and the criteria again so that we can really emphasize that in our program tonight?

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Joseph Mikhael:

Yeah, I think that's so important. So historically, we made the diagnosis of myeloma when someone has a monoclonal protein that involves the bone marrow with a greater than 10% plasma cells and they have one of these key defining events that we've historically called the CRAB criteria, C-R-A-B, so a calcium elevation, renal insufficiency, anemia or bone disease, meaning some kind of a bone erosion or destruction that is attributable to the plasma cells. A few years ago, we updated the criteria of myeloma to add to CRAB three more features. So sometimes, Edith, we call it SLiM-CRAB. That was my contribution to the myeloma community where we added the word SLiM or S and then Li together and M. S stands for 60% plasma cells. So if someone has a bone marrow test done and they have 60 or more percent plasma cells, that's active myeloma. Li stands for light chain. So if the light chains involved over uninvolved or the ratio as we often think of it of involved over uninvolved is greater than a hundred. Or if M the MRI of someone's marrow shows more than one focal lesion. So those three factors plus CRAB creates SLiM-CRAB and if anyone has those, then we have to be obviously very wary that they have active myeloma. If the marrow is involved, then they do have active myeloma. So these are really important things because myeloma is again one of those conditions where someone may not have anemia, someone may not have renal sufficiency or someone may not have an elevated calcium. We really have to look for all of them because some patients may only have one of those seven but still have active multiple myeloma.

Edith Mitchell:

Absolutely. So it's very, very, very important that primary care physicians, as well as other physicians who may see the patient for other symptoms, for example, orthopedics. Many patients will have bone problems and therefore be referred or consulted with orthopedic specialists. So therefore, it's really important not only for the primary care physicians, but for other specialists and subspecialists to look for the symptoms of myeloma so that patients may be correctly and appropriately, as well as timely, afforded the diagnostic criteria and therefore earlier introduction into therapeutic interventions. So Dr. Mikhael, there have been a lot of new drugs approved by the FDA for treatment of myeloma. There have been combinations that have been developed. Can you talk to us about some of these new treatments and combination therapeutic interventions that might be available for individuals?

Joseph Mikhael:

Absolutely. So myeloma in many respects has been an extraordinary disease in that we've doubled, if not tripled, the average survival of patients over the last decade. We have shown sadly that that survival has not been realized by all groups of patients and indeed, the survival improvements we've seen in the white population has only been... In the Black population has only been half of the white population. But a lot of these therapies have revolved around introducing new drugs and in using them in combinations, typically the combinations of proteasome inhibitors, immunomodulatory drugs and monoclonal antibodies into what we often call triplets, the appropriate use of autologous stem cell transplants. Thirdly, the very new introduction of CAR T-cell therapy, or chimeric antigen receptor T-cell therapy, and then of course, all along the way clinical trials. So I often call those the four big Ts, right? Triplets, transplants, CAR T and trials.

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Joseph Mikhael:

And all four of those we know have significantly improved both the quality and quantity of life of our myeloma patients. But on the other side, in light of our discussion today, Dr. Mitchell, the sad part is we've also sadly demonstrated unequivocally in multiple trials and in multiple studies for each of these four areas that African Americans are less likely to access triplets, meaning they're more likely to only get a doublet or a single drug instead of the combination, they're less likely to access autologous stem cell transplants by about at least 37% in our last big database review. Thirdly, with this new introduction of CAR T-cell therapy, we've sadly seen a reduced access from many groups, including African Americans, where there's been a dramatic under-use of CAR T-cell therapy. In fact, even from a socioeconomic standpoint, very few patients in lower socioeconomic statuses have been able to have access to CAR T-cell therapy.

Joseph Mikhael:

Less than 2% of individuals come from a subset where the family income is \$40,000 or less. And then indeed, over the years, we've noticed that in clinical trials, although, as I mentioned, African Americans comprise roughly 20% of all myeloma patients, historically representation in clinical trials has been more like seven or 8%, and even less frankly, in the pivotal trials that have led to drug approval. So despite these great advances, and we want to support them, and it's wonderful, and I've had the privilege of being involved in these four areas of triplets, transplants, CAR T and trials, we see yet the disparity at each level and how critical it is for us obviously to develop ways to overcome that disparity.

Edith Mitchell:

Oh, absolutely. And with all of the new developments, the new clinical trials, in my opinion, every myeloma patient should be entered on a clinical trial because that's where the new discoveries are located. And not only that, these trials include genomic profiling and we know that there are certain genomic entities that might allow for number one understanding of the disease process, but also may aid in the selection of treatment. So can you say a bit about that, Dr. Mikhael?

Joseph Mikhael:

Oh, I mean, I work at a translational genomics research institute. I can't help but answer that question. Absolutely.

Edith Mitchell:

I know that.

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Joseph Mikhael:

And so, I mean, we do understand that the biology of myeloma is somewhat different in general in the African American community, we mentioned that the average age of diagnosis is younger. We've seen differences in some of the common cytogenetic abnormalities we see in myeloma, for example, translocation 1114, which is typically in general been a better prognostic marker, is considerably more common within the African American community. And on the other hand, the p53 deletion, which is sadly a negative prognostic marker in myeloma, is actually less common within the African American population. So you would think that outcomes would actually be better when in fact, as we've described, outcomes have been inferior in this population. What drives us, I think, Edith, in this vein, as you said, not only to discover and understand the disease better, but to be able to provide personalized and targeted therapies, has also been validated in larger sets.

Joseph Mikhael:

We look at, for example, some of the very important VA studies that we've learned from where, at least we know theoretically, everyone has equal access to the therapies. When we've looked at those large database therapies, ironically, African American patients have not just done as well as white patients, in fact, they've done better. So we know that access is a huge problem here and this does speak to the biologies we've described, but sadly speaks to the lack of access for the diagnosis as we've described, and indeed the therapy. And so that to me is, although it's a sad reflection of reality, that's the motivation to me, Dr. Mitchell, that's the call to action to me saying that we know we can do so much better, let's do something about it.

Edith Mitchell:

Absolutely. And with the genomic alterations in various patients, as you said, some patients who are Black are predicted to do better than the white patients, and in clinical trials that has been shown. So if found early with appropriate diagnostic testing and selection of drugs, we may have patients who are Black who actually do better than the white patients because of the genomic alterations that are defined. And certainly TGen (Translational Genomics Research Institute) has been a leader in the world as far as defining those genomic alterations in myeloma. So thank you and thanks to TGen. So there are more information about the Black patients in that bone marrow transplant has offered some significant benefits to patients. However, African American patients undergo evaluation for bone marrow transplant a lot less than other patients and have been compared to white patients. So why are there fewer Black patients being evaluated for bone marrow transplant?

Joseph Mikhael:

Yeah, that's an excellent question. Each of those four Ts that I described have a whole story within them and the bone marrow transplant story is an important one and complicated. But as we understand it and study it, we've come to appreciate that again, it's a complex set of reasons that African American patients are less likely to simply be referred to a transplant center, let alone have the ability to get to a transplant center either geographically or because of transportation. A lot of our transplant centers are not located in more rural communities where many of our African American patients may live. There's a lack of trust within the system, especially something as intense and as time consuming and as challenging as an autologous stem cell transplant. Often for socioeconomic

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reasons, people may not be able to be off work or be away from their families for the time that's required for transplant.

Joseph Mikhael:

And then as we've said before, throughout the whole program here, that the access to diagnosis, the access to the right testing, the ability to resonate and communicate and connect with their healthcare team has historically been a problem in this disease and in particular of transplant. Which is of course one of the reasons why I think so many of us are committed and in the work that I'm seeking to do at the International Myeloma Foundation through our M-Power Project, which is a bit of a play on words, M dash Power, standing for empower. We want to empower patients and communities to change the course of myeloma, that these things we've described, the delayed diagnosis, the lack of access, the lack of therapies can be changed if we work together to do so.

Edith Mitchell:

Oh, absolutely. And certainly the social determinants of disparities and social determinants of health also may contribute, such as lack of insurance, health care that is dependent on Medicaid and of course, there are still a number of states that do not have expansion of Medicaid through the Affordable Care Act, so many others. And you've mentioned the distance from a transplant center as well as the ability of the patient to get to those centers, to leave work for a day or more days for undergoing diagnostic testing. So there are many social determinants of health that may also negatively impact the ability of Black patients to undergo therapeutic interventions for myeloma.

Edith Mitchell:

There is also the fact that in states that have expanded Medicaid for treatment of oncology patients in general, there has been benefit demonstrated that Black patients get to centers more frequently, earlier and therefore are able to undergo therapy for myeloma. So we must remember that the Affordable Care Act has provided increased access for Black patients to get the latest and greatest treatment. So Dr. Mikhael, can you tell us a little bit more about those Ts and what they mean and how the Ts have benefited our progress in myeloma?

Joseph Mikhael:

Absolutely. No, I think you've said it so well, Edith. So we start to appreciate that if we're going to overcome this challenge, it really means that we are going to look at it every angle, from a health policy standpoint and governmental standpoint, as you've described, from our partners in the industry, the healthcare team, reflecting all those social determinants of health, as you described, our healthcare systems, all of these are going to be necessary if we are going to make use of these four T's, as you described, the triplets, transplants, CAR Ts and clinical trials. And so we really have to look at multiple ways of doing so.

Joseph Mikhael:

I can share that in the work that we're doing at the International Myeloma Foundation, we've focused on two major areas within this large rubric. One is that early and accurate diagnosis of multiple myeloma. So we have deep community engagement in multiple cities and nationally to try and raise awareness around myeloma within

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the Black community. Have people understand what are the signs and symptoms, could I potentially have myeloma, should I see my physician to discuss this more and understand it better, do I know someone with myeloma so I can provide support to them and provide them the resources that they need? That sort of a deep community engagement.

Joseph Mikhael:

But also secondly, reaching into the healthcare community, speaking to primary care physicians and the work that you and I have done together through the National Medical Association and through multiple other venues where we want to help these physicians discriminate between diabetes and myeloma. To know that orthopedic surgeon to think about myeloma when they see a certain pattern, for the nephrologist to see it, the cardiologist, the neurologist, so that everyone can help in that earlier and more accurate diagnosis of myeloma so that patients can then get onto the path, as we've described, of then having access. And that indeed is the underpinning of all of this is, it's one thing to think about it,, it's one thing to even arrive at the diagnosis, it's then another to deliver and have access to that care. And so we seek to provide resources and opportunities for people to access that care. And I think if we all work together in different roles, we have a greater opportunity to significantly reduce that large health disparity that we've described today.

Edith Mitchell:

Oh, absolutely. And it's collaboration in healthcare. And again, we can say it's not just the primary care physician, it's all physicians, endocrinology, orthopedics, and others. And patients you and I have seen over the years where a patient with myeloma was discovered after they received some kind of bone biopsy that was attempted for other disease processes and it turns out that the disease process is myeloma. So there are collaborations. You've mentioned our work with the National Medical Association, which is an organization of Black physicians. It was founded in 1895 when Black doctors were not allowed to join other medical societies at the time. So working with a group of Black doctors has helped. We also have worked with other organizations, so perhaps you can talk about the International Myeloma Foundation, the M-Power, myeloma power. So let's have you give some definitions of how these other organizations are working very hard and making strides in myeloma care.

Joseph Mikhael:

Well, thanks, Edith, for giving us the opportunity to share a little bit more of what we're doing with this M-Power Project. As I mentioned, we call it M-Power, M dash Power standing for myeloma power, to empower individuals and communities to change the course of myeloma. And people can read more about this and understand more about it at mpower.myeloma.org where we as a foundation are working very hard in partnership with multiple, literally dozens, of organizations across the country, both medical and non-medical. So we'll work with, as we've worked with you at the National Medical Association and Black Nurses Association.

Joseph Mikhael:

But also working with fraternities and sororities and churches and community associations and local healthcare organizations to really raise awareness around myeloma with within the community, educate the lay community around the signs and symptoms of myeloma and indeed, the healthcare community so that they can arrive at an earlier and a more accurate diagnosis all the way along, providing the kind of support that we always seek to bring

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to patients. We have over 160 support groups across the country and we want to encourage these patients to tap into the resources that we can provide to them so that they can develop greater access, that even if they are in an area where there's less coverage or their insurance has less coverage, that we can look at opportunities and solutions for them so that people can indeed access the kinds of therapies that we know can really make a difference.

Edith Mitchell:

Thank you so much, Dr. Mikhael, for the great discussion that we have had today about myeloma. And just to remind the audience that the SMART goals are to know the facts about myeloma in the Black community, recognize the signs and symptoms of myeloma, differentiate myeloma from other diagnoses such as diabetes, osteoporosis and renal disease, hypertension, which can affect the kidney function and therefore may obstruct the diagnosis of myeloma, use proper testing to capture and accurately diagnose myeloma, refer to hematology and oncology with suggestive testing results, deliver culturally competent care and encourage clinical trial participation for patients. Clinical trial care is also covered by Medicaid and therefore don't assume that the patient would have no insurance. And explore opportunities for coverage for the patients.

Edith Mitchell:

So I thank you so much, Dr. Mikhael, for your discussion of myeloma and the things that we all can do to help patients. And that's what it's all about, helping patients. To receive CME and CE credits for today's program, please complete the post-test and evaluation. You will be able to download and print your certificate immediately after appropriate completion. Lastly, please visit the CME Outfitters Oncology Hub to access additional activities on relevant oncology topics and the diversity and inclusion hub for discussions of disparities in healthcare as well as resources and patient education materials. Again, thank you so much, Dr. Mikhael, for joining me in this discussion and to the audience, thank you for your attendance today and please visit CME Outfitters Oncology Hub for other additional activities. Thank you so much and good night.

Joseph Mikhael:

Thank you, Dr. Mitchell.