Episode 2: Dr. Otis Brawley Talks about Cancer Disparities as Barriers to Better Outcomes for All Transcript

[00:00:00.000] - Speaker 2

Hello, listeners. This is Camilla Frost-Brewer, your host of Luminaries of the UCCCC. And today we are joined by Dr. Otis Brawley. Thank you so much for being here today.

[00:00:11.780] - Speaker 1

Thank you for having me.

[00:00:13.080] - Speaker 2

I can't wait to get to talk to you and get to know your story. So let's jump right in. For our listeners, can you please introduce yourself? And if you feel comfortable, maybe share with us what made you want to become a cancer researcher. Sure.

[00:00:27.720] - Speaker 1

Well, I'm Otis Brawley, and my current My title is Bloomberg Distinguished Professor of Oncology and Epidemiology at the Johns Hopkins School of Medicine and the Johns Hopkins Bloomberg School of Public Health. And most of my career has been doing work in epidemiology and cancer outcomes and looking at differences amongst populations and things that came to be called health disparities. And now we're starting to talk about health equity.

[00:01:02.080] - Speaker 1

That's absolutely correct. And much of What I've done over the last 30 to 35 years is first in the 1990s, we spent a lot of time describing the fact that there were disparities. I was very I'm fortunate that in the 1990s, for a time, I worked for David Satcher when he was Surgeon General. And David Satcher really changed the name from Minority Health, first to Special Populations Health, and then I was in the room the day he first used the words together in my
Forest Gump existence. I was there when he said, Let's call it Health Disparities, Disparities in Health. And I want to see some of these politicians who are pushing back against us, say, I'm against programs to reduce disparities in health.

[00:02:09.940] - Speaker 2
What a special moment that you were in the room for.

[00:02:13.100] - Speaker 1
We actually knew it was a special moment when it happened.

[00:02:17.270] - Speaker 2
Did you take a photo? Did you commemorate it? Do it cheers?

[00:02:20.690] - Speaker 1
Well, unfortunately, this was 1996, 1997, and we didn't have cell phones with cameras in them and that stuff. So we have some photos of when we work together, but not the way we would document it today. Today, of course, we would tweet it or exit out or something like that. It took quite a while for the phrase to catch on.

[00:02:47.790] - Speaker 2
And catch on it has. So that's so special. Can you talk to us about maybe why you were inspired to become a cancer researcher?

[00:02:56.900] - Speaker 1
Well, growing up in Detroit. I went to the Catholic schools. I went to the Jesuit High School in Detroit, the University of Detroit Jesuit High School. I was told by Father Polakowski to come to the University of Chicago, and I did exactly as he said. I had a good time here as an undergraduate, as a chemistry major. I met a lot of really wonderful people who influenced me the rest of my life. One of the most important It was an infectious disease doctor named Elliot Keefe. He was a virologist, a herpes virologist. Had a lab in the Kovler Labs, I remember, because he gave me a job there for a while. And Elliot worked very hard to convince me that I
should go to medical school as opposed to a career in basic science. And this was in my junior and senior year of college. And I applied here and got in here and came to the medical school. In my second year in the medical school, I was in a lecture. It was a tag team lecture with Harvey Golub and John Altman. And those are two of the pillars of oncology, especially John, who was one of the 60 people who founded medical oncology in the middle 1960s.

[00:04:27.310] - Speaker 1

I enjoyed their tag And I did a tag team lecture and ended up talking to Dr. Altman afterwards, and he and I became friends for the rest of his life. And I was a second year medical student at the time. And I had always been interested in science and policy, and he convinced me that there was a lot of policy in oncology, and there's a lot of good science in oncology. And in the 1980s, he and several people people here, Phil Hoffmann, for example, were able to look and see that oncology was going to blossom. The good science was really being done at that time. So I ended up training in oncology. Then I went to the National Cancer Institute to train in oncology, and John helped me get my job at the National Cancer Institute. And There, I came under the influence of a fellow named Barry Kramer. He taught me epidemiology, and then I went to learn even more epidemiology from the group there. That's how I started in the field of outcomes, and outcomes went into health disparities. Health disparities really is a sub-study of epidemiology.

[00:06:00.010] - Speaker 2

Wow. I will have to link all of those people in the description for this episode, because what a wonderful list of change makers, creators, researchers, Who created the face and changed the field of oncology.

[00:06:20.580] - Speaker 1

My experience was one heavily, heavily influenced by mentors and mentorship. Yes. One thing that John Altman told me that I definitely want to say, because in many respects, I am a child of affirmative action, and I don't run away from that at all. When I interviewed for fellowship, John told me the nine places he wanted me to apply to, and I interviewed at all nine places. And then eventually, I got to NCI, and I thanked him for all of the help that he gave me. And he said in his Austrian accent, Otis, Medicine is an old boys club, and you will thank me by getting more blacks and women into it. And I have taken that to heart ever since he said that back in 1986. Wow.
I'm going off script here, but share with us how you've put that into action.

Well, I put that into action through trying to help as many people as possible. One of the things that he also taught me is the greatest compliment one human being can give to another is to say, Can you help me? And so I feel a special obligation to help people who are trying to help themselves. Very much in keeping with what John was thinking, it's not just Blacks or women I'm in, it's anybody. A lot of my work, by the way, has been on the poor outcomes in health care, especially cancer health care, among poor Whites, especially Southern Whites in the United States. So he has influenced me a great deal. I have a number of people who I've mentored, at almost every level you can think of, from high school all the way through post-doctorate and early faculty, indeed. And one of the parts of my job that I enjoy at Johns Hopkins was I was brought in as a Bloomberg Distinguished Professor with an endowment from Michael Bloomberg to be a seasoned elder statesman whose job it is to mentor young assistant professors and help them develop their careers.

That's so special. I want to ask more about what mentorship means to you as the mentor, because I think in your story you shared with us, I don't know if the trajectory would have happened if you didn't have mentors who were there with you?

No, the trajectory clearly would not have happened. Without those medical mentors. I had one other University of Chicago mentor who was very important, who's not a physician, but he certainly encouraged me, and that was a fellow named Jonathan Fenton, who was the vice President for Development at the time. He was the fundraiser for the University of Chicago. He went on to become a University President and do some other things. But a young Jonathan Fenton became a friend of mine, and he showed me some of the administrative skills that I later used when I was at both the National Cancer Institute, where I rose to be an assistant director at Emory, where I ran a large part of the Cancer Center. And then I spent almost a dozen
years as chief medical and scientific officer of the American Cancer Society. And those were science administrative jobs that had a lot, especially the American Cancer Society job, we oversaw the largest private fund for cancer research, but it also had a large policy element as well. So I got to do that policy thing I was always interested in going all the way back in high school.

[00:10:52.290] - Speaker 2
Amazing. Congratulations on being an alumni star for the University University of Chicago Medicine Comprehensive Cancer Center. We look forward to your talk. Hopefully, it will be recorded and we can link it in the description of this episode. But I just want to hear about your time at U Chicago. You said you were here for undergrad and medical school. What was it like being in Chicago, being here on the south side at that time?

[00:11:22.350] - Speaker 1
We used to say the University of Chicago is a gray place. The weather is gray, the buildings are gray, the President is Hannah gray. We actually made fun of ourselves for being nerds and being people who did not like fun. And that actually was totally untrue. That was totally untrue. But that was how we passed ourselves off. The University of Chicago and Chicago in the late 1970s, that was right... I got here just as the elder Mayor Daley died, and he was replaced by Mayor Verduleac, and then Jane Bern was mayor for much of my being in college. When I was in medical school was when Harold Washington, the first black mayor, was elected mayor. And so it was an interesting time. There was a great deal of upheaval in city government. There were any of the issues that we hear about today were the issues that we heard about back then as well. And so it was a good time to grow up in Chicago, and I had a wonderful experience here.

[00:12:47.350] - Speaker 2
Do you think being in Chicago in the late '70s and early to mid '80s influenced any part of your interest in health disparities work?

[00:12:57.220] - Speaker 1
I got to see my first health Health disparities, really, when I was growing up in Detroit. I did not realize what I was seeing at that time. I started seeing more of them as a medical student here.
The patients that we saw as third and fourth year medical students here were of two ilks. There was the poor folks from the south side and the folks who, some of them would actually fly in to see, especially Mostly in the ulcerative colitis and Crohn's Center. People would fly in from all over the world to see Dr. Kershner. We would see people who would come from all over northeastern Illinois, and Southeastern Wisconsin, Northwestern Indiana to be treated, especially if you had a lymphoma. The place to be treated back then was the University of Chicago. And so we saw two very different sets of patients, very wealthy and very poor. In pediatrics, we did actually see a good number of poor Whites from rural Illinois who were brought up here because their kids had unusual diseases. So I started realizing that there were some differences. I, of course, didn't use the phrase health disparities or disparities in health until the late 1990s working with David Satcher.

[00:14:29.620] - Speaker 1

But yes, I did start realizing that. But in the 1980s, my focus was more on how to get health care paid for and not as much on disparities. And then now I realize how to get health care paid for. I worked a great deal on the Affordable Care Act when I was at the American Cancer Society. Now I realize, even more so than back 15 years ago, that getting health care paid for is about 20 % of the problem. Instead of getting health care paid for, we need to focus on how do we get adequate health care from prevention. And prevention risk reduction has terribly been ignored in this country. Appropriate screening, we overdo screening in this country. A lot of the screening is inappropriate and ineffective, but there is an appropriate screening that should be done. Appropriate diagnostics and appropriate treatment. We need to focus on all of those things. The question we need to ask is, how do we get adequate high quality care to people who oftentimes don't get it? When we were doing the Affordable Care Act, we all thought, just pay for it and it'll happen. But that still doesn't get the care to the people, even if it's paid for.

[00:16:00.370] - Speaker 1

And so this is wisdom of an old man now. And so much of my work nowadays focuses on trying to refocus on what really matters. One of the things that I like to point out to folks is that the life expectancy in Costa Rica is two years more than the life expectancy in the United States. The death rate from cancer in Costa Rica is about half the death rate of cancer in the United States. They spend a little less than $1,000 per man, woman, and child on health care every year in Costa Rica. We spend close to $15,000 per person on health care. The difference between Costa Rica and the United States is Costa Rica has figured out, maybe they didn't intentionally figure it
out, but the importance of risk reduction and cancer prevention. They don't have screening programs there. They don't have huge treatment programs. They don't have a lot of cancer. They have some, but they have half the death rate that we have in the United States from cancer because their lifestyle promotes reduction in risk of cancer. And that's something that we need to focus on. One of the things that we published from my group about four or five years ago is the death rate of a college-educated American from cancer is about 60 deaths per 100,000 per year.

[00:17:38.160] - Speaker 1

The death rate of someone who either dropped out or just graduated from high school For women, it's twice that 60, and for men, it's almost three times that 60.

[00:17:51.070] - Speaker 2

Wow.

[00:17:51.920] - Speaker 1

Okay? Literally high school graduate males, their death rate from cancer is 180 That's per 100,000, about that. Whereas college, it's about 60. If you get to college and drop out, you get most of the benefit. What that tells us is we need to focus on our kids. It's not necessarily get all our kids to college, but get all of our kids the childhood experiences of those kids that end up going to college. They're less likely to smoke, less likely to be obese. By the way, the combination energy and balance of consuming too many calories, storing them, we call that obesity, and not expending them, we call that not enough exercise. Consuming too many calories, obesity, and not enough exercise is the second leading cause of cancer in the United States. And of course, it also causes cardiovascular disease. It causes diabetes and other things. We need to focus heavily on risk reduction. In the United States, in 1970, 5% of our kids were obese. Today, it's more than 20%. In 1970, 15% of our adults were obese. Now, it's more than 40%. We desperately need to focus on risk reduction. And of course, I haven't even started talking about smoking.

[00:19:22.250] - Speaker 1
The fact that 15, 18% of Americans still smoke is a huge problem. Huge, huge problem. We talk sometimes about the avoidable causes of mortality. I gave you a whole bunch of them right there.

[00:19:38.310] - Speaker 2

You did. You really did. I've heard you speak in different recordings about that trifecta of storing calories, taking in too many, storing them, and then not expending them.

[00:19:49.370] - Speaker 1

We sometimes say it's a three-legged stool.

[00:19:51.990] - Speaker 2

That's it. Three-legged stool, not trifecta. I feel like trifecta has a different connotation. You really did It dropped a ton of wisdom just now, so thank you. I hope our listeners will share this with their circles of influence, if you will. Again, going off script, but you have such knowledge that I want to tease out. You said a lot of your original work was about getting health care paid for. You worked with the Affordable Care Act, and now you're thinking more about risk reduction and prevention work. What does that look like, maybe day to day for you?

[00:20:30.130] - Speaker 1

Well, I spend a lot of time with policymakers, politicians, state government. Actually, some of the most fun that I've had recently is talking to principals. Unfortunately, they're principals more of high schools and junior high schools, and we need to get to the parents of preschoolers and the parents of people in grade school. And we need to start thinking about simple things like five to nine servings of fruits and vegetables per day for third graders. Those are some of the things that I work on. I spend a lot of time writing and Getting the stuff written down and getting it communicated in ways that people can understand it. I spend a lot of time with people in the news media. I've had a relationship with CNN for for more than 20 years because we need to be able to explain this to the population and explain it in a way that they can accept it. I had a Washington Post reporter who was shocked that I spent three hours with them last week, and I explained to them that their job is actually more important than mine, because I can learn all of this about how we're going to prevent these diseases.
But if he doesn't communicate it right, it's not going to happen.

Right. At the base, it's almost a science communication piece that is so key. You can do so much amazing work, change individual lives, but if the general population isn't receiving that information. And also, I feel like there's an element of not blaming or shaming the general population and bringing them into this solution, right?

The Cancer Center of Today, Richard Nixon signed the National Cancer Act in December 1971. And one of the things that the National Cancer Act did was give the NCI National Cancer Institute and the NIH, the National Institutes of Health, a lot of money for research, not just cancer research. It created lots of grants programs to fund research at universities, and it created the Cancer centers program, of which the University of Chicago was one of the first cancer centers. The role of the Cancer Center back in the 1970s was to do a lot of basic research and define what cancer is. And the molecular biology and genetics, genomics that came out of that is just absolutely amazing. It's the basis for many of the drugs for treatment that we have today. For the next 50 years, I think it's going to be very important that it communicate findings, communicate what we understand, communicate where cancer control efforts ought to be going. Community outreach and engagement is going to be incredibly important for the cancer center of the 21st century, certainly of the middle part of the 21st century. Getting into the community and getting people to understand these things that we're talking about today.

A hundred %. We talk about this at the cancer center here about how are we infusing and engaging our community outreach and engagement team in everything we do. And it's a lot for them. But you see the changes happening, even if it is slow change, it's still change.
Yeah, that's absolutely correct. It's changing. We're getting there. Mortality from cancer has gone down 31% from 1991 to about 2018, 2019, the last year that we have data. So And the question is, how do we get it down more? I'm telling you how to get it down more. Let's focus more on the risk reduction, focus more on the prevention. At the same time, we do have to focus on treating people who actually have disease. One of the most important papers that I did over the last 25 years, it wasn't really me as much as it was one of the people I was mentoring. She simply discovered that 7% of black women who were diagnosed with localized curable breast cancer in Metropolitan Atlanta in the early 2000s got no treatment in the first year after diagnosis.

[00:25:35.940] - Speaker 2

Wow.

[00:25:36.950] - Speaker 1

That I thought, was incredibly important. These are potentially curable breast cancers.

[00:25:43.080] - Speaker 2

Yes. May I ask, what were the proposed reasons why?

[00:25:53.870] - Speaker 1

Oh, some of them had to do with payment. Some of them had to do with the fact that our medical systems are not really good at tracking people. So if someone withdraws from the medical system, there's no one to call them up and say, Hey, come back. That is a problem in our health care system. Many of the These women withdraw because they had daycare issues. Very common. It was not their children. It was their children's children that they had to look after, and they didn't have time to get with surgery and chemotherapy and radiation. That was a short term idea on their part because they ultimately got very sick. Sometimes it was when Auntie had her breast surgery, she died six months later. I'm not ready to die, so I'm not going to get breast surgery. Not realizing that aunt Sally was discovered quite late, you're discovered quite early, and this is a way of keeping you from becoming She was coming, Auntie Sally. If I tell my boyfriend, I have breast cancer, he will leave me. And the one that really upset me a great deal was when aunt Sally went to the family reunion, they gave her her food on a paper plate and ostracized her because they didn't want to catch breast cancer from her.
I don't want to be ostracized, so I'm not going to get treated and lose my hair.

Yeah. Okay. That's a myriad of reasons.

A myriad.

And it's like, how do you work through that? How do you tease that out to provide appropriate care for all these folks?

The first way that we start changing things is we make sure people are aware that these issues exist and that these issues are a problem. And until we can make sure that people know that these are a problem... Let me tell you one that I discovered only in the last five years, it costs $15 a day to park at Hopkins to be seen as a patient. And I found out there's some people who have some wonderful insurance that'll pay for me to see them and treat their cancer. But they can't come up with the $15 to park in our parking structure so they don't get treatment.

$15. I understand why. Let's just pay for health care. I understand where that comes from, right?

Yeah. Well, it gets really crazy. There's one poor guy, wonderful man, Who was getting an $8,000 nuclear medicine scan. And I normally saw him in our office out in the suburbs, where we have free parking. But this scan is a special scan. He had to go to our downtown campus to
get it. His insurance is going to pay for it. He had to pay nothing for the $8,000 scan. He drove in, pulled the ticket, realized how much it was going to cost to park his car, and drove out before he had to pay anything and skipped getting the scan. By the way, since it's a nuclear medicine test, they ordered the nuclear their medicine for him the night before, and it could only be used for him or on somebody that day, or else it expires. And so we lost $8,000. We lost that medicine that day because this guy couldn't pay $15 for parking.

[00:29:49.240] - Speaker 2

Wow. I feel like that's some of the work as a program manager for DEI, that's some of the work that I and community outreach and engagement can work on through this second part of the 21st century, right?

[00:30:07.700] - Speaker 1

Yeah, that's absolutely correct. We need to get a focus on how do we get care to people? The National Cancer Institute is focused so much on cancer centers ought to listen to their population that they serve. I agree to that to a certain extent, I think it ought to be phrased that cancer centers ought to understand the problems of the population that they serve. And then cancer centers need to work with them to develop programs to try to overcome those problems. Some problems are going to be very local, and some problems are going to be very national. For example, I'm aware of an area in Houston that seems to have a very high level of leukemias. That an epidemiologic challenge is something that a cancer center in Houston might very well serve the community by helping the study. We in Baltimore have a huge issue with people who are... 10% of the city of Baltimore is hepatitis B or C. And so we need to have a hepatitis program, although that has some issues as Well, hepatitis C is curable with a $50,000 cure that many of the people who happen to have hepatitis C can't afford.

[00:31:54.850] - Speaker 1

There, we need to be able to talk about that and try to get our our politicians to listen to us and enact some programs.

[00:32:04.900] - Speaker 2
I know you have spoken a bit about your experience at University of Chicago and how it's influenced your trajectory. I'm just wondering, are there any key moments or things that you learned here that you've carried with you throughout your career?

[00:32:23.960] - Speaker 1
I learned how to study. I learned the study habits. The study habits, the nerd in me came out of eight years of living in Hyde Park and going to the University of Chicago. I left Detroit, came to Chicago, and discovered there was a whole world out there in many respects. Some of the administrative, how to manage people, all of those things came to me through some of my Chicago experiences. I think it's important to note, it's not just the experiences in the classroom or in the clinic. It's experiences that happen over in the field house and playing football out on the Midway Pleasant. There are a number of good experiences that happened to me here that shaped me both as an administrator, shaped me as a scientist, shaped me as a physician, shaped me as I am a politician.

[00:33:31.980] - Speaker 2
You are. Politician of the people. What position in football?

[00:33:38.050] - Speaker 1
Oh, I was always a lineman, a downlineman.

[00:33:42.130] - Speaker 2
Excellent. I know next to nothing about football, but I really enjoy watching it.

[00:33:47.880] - Speaker 1
I was one of the big guys up front whose job it was to either go get the quarterback or protect the quarterback, one or the other.

[00:33:56.120] - Speaker 2
Okay. Got it. I know exactly those people. Excellent. Very Cool. So our last question for you today is, where do you hope to see cancer research, care, discoveries, and advancements go in the next 50 years?

[00:34:11.070] - Speaker 1

Having seen what's happened with COVID, we need to work very hard to teach people about science and the scientific method. When I see a patient, I still see patients with metastatic prostate cancer. I explain to them that I am a man of science. I only give treatments after we have studies to show that those treatments are effective. Then I tell them, I don't know how to treat you. I know from my science how to treat a large number, 100 people like you. And I know the treatment that I'm giving a hundred people like you, they do better than getting any of the other treatments that we used to use or even some that are still available, usually in other countries. And the idea of doing science to figure out how well something works or if something works, even before that, we need to teach that to folks. I'm really taken aback by the fact that the COVID vaccine, the development of the COVID vaccine is some of the most amazing science. And by the way, it stemmed out of the National Cancer Act. A lot of that basic science, a lot of that molecular biology and virology that led to the understanding of COVID and the COVID vaccine.

[00:35:51.300] - Speaker 1

All was basic science that came out of Richard Nixon signing that law back in 1971. And but in any event, we need to educate the public about science and the scientific method. Then we need to educate the public about what our scientific study has shown us. And we've already talked about the cancer prevention, risk reduction, moving some of our focus away from screening tests that we have studies to show don't work or don't work very well. There's some screening tests that we have studies to show work really well, and people aren't doing them. One of the most interesting policy issues that I'm dealing with, this is a Maryland issue. It's probably an issue elsewhere, is we have a substantial number of people, 60% of Americans or 60% of Marylanders over the age of 50 have not gotten any colon cancer screening. And colon cancer screening really saves lives. It really works. There are question marks about mammography, even more question marks about prostate cancer screening. But colon screening clearly saves lives. And 40% of Marylanders don't have it. There are parts of Maryland where there are very few GI docs who can do a colonoscopy.
And when I ask, why are people not getting screen? Well, we don't have docs to do colonoscopy. It's very interesting. The science to show that yearly stool blood testing that costs $30 a test, saves lives, is actually better and more sound than the studies to show that colonoscopy saves lives. Wow. Okay. Now, I'm not saying colonoscopy doesn't save lives. It definitely does. But these people are not getting any screening because they can't get a colonoscopy, but they could get stool blood testing. They can get stool DNA testing, which is also available. That's an education issue. That's also a policy issue. In Maryland, the policies were really encouraging people to get colonoscopy. And so this is some of the more practical aspects that a little bit of good knowledge can help save a lot of people.

Helps save a lot of people. Thank you again, Dr. Brawley, and it is such an honor to get to speak with you. My pleasure. My pleasure.