**LabMed Podcast Ep 5 - Octavia Peck Palmer - FINAL**

MUSIC JINGLE

**VO - Welcome to *Life in the Lab*, brought to you by the Association for Laboratory Medicine. I'm Kamiljit Chatha, and I'm a Consultant Clinical Scientist at University Hospitals Coventry and Warwickshire NHS Trust. In this series, we bring you inspiring stories of clinical scientists and medics working in laboratories in the UK and around the world.**

**Today, we’re chatting with Octavia Peck Palmer, a Clinical Chemist and the Vice Chair of Health Equity, Diversity, & Inclusion in the Department of Pathology at the University of Pittsburgh, in the U.S. In her role, she works on creating and leading strategies that promote inclusion in the practice of laboratory medicine and pathology**

**Octavia’s interest in medicine started at a young age, but it’s her passion for research that really drives her.**

Exciting, challenging, and rewarding… that's just what research meant to me. And when I was working on my PhD at the Medical University of South Carolina in Charleston, South Carolina, it was on sepsis.

**Sepsis is a serious condition where the body doesn’t react well to an infection. Instead of fighting it off, it ends up attacking its own organs, and then they stop working properly.**

**While Octavia was researching sepsis, she started noticing something important: people weren’t all affected by it in the same way.**

It impacted black individuals along with elderly and children disproportionately. And so, I was really interested to think about: how do I go from this basic research to being impactful to the people that are being affected by sepsis? And so, that's what led me to laboratory medicine because every day I could conduct an experiment to provide information to a healthcare provider where they could make a diagnosis, or they could determine what is the specific drug or therapeutic intervention that this patient needed. And so, you know, really the beginnings were me trying to find a way to contribute to individuals living their healthiest life possible.

**After finishing her PhD, Octavia continued studying sepsis, digging into why it affects certain groups of people more than others. By the time she took her first faculty position at University of Pittsburgh in 2008, she had already seen how these kinds of disparities show up in other medical conditions across the U.S.**

**And it’s worth pointing out that while her research focused on the United States, health disparities aren't just an American issue - they affect the U.K. and the rest of the world.**

Health disparities have been recognized for decades.  There is a host of data that tells us that health disparities exist, yet we have not been able to eliminate them.

There are social determinants of health that impact the way in which you can experience health. Those are factors such as poverty. Do you have enough money to be able to have, number one, insurance, then to be able to afford the ability to go to a physician? Things such as transportation. Not being able to go and see a physician. Educational inequalities. Do you have the health literacy to understand when and how and where to receive care?

It can be that individuals have gone to see a health care provider. But that engagement that they had with that health care provider was so traumatic that they refused to come back. There's a distrust of medicine.

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**So, what’s behind these social factors and health disparities? At the heart of it, it’s really about deep-rooted, systemic clinical algorithms that end up reinforcing stereotypes, biases, and even racism.**

**And that’s exactly what Octavia has dedicated her career to changing.**

 When a clinical laboratory takes a sample from you, we analyze that sample and we provide the accurate and timely result. However, these clinical algorithms will make an adjustment to your result based off of race. So, if you're black, or if you're Hispanic, or if you're Asian, or if you're white, there is a score or a modification to that value that we've already provided them.

All specialties of medicine, from nephrology which is the kidney, to cardiac which would be your heart health, to obstetrics and gynecology, there is race adjustment being performed on results that the clinical lab has already provided. And that has demonstrated delay in care, misdiagnosis, no care.

There are studies that demonstrate that black children actually receive 24 percent less testing in the emergency department compared to other children.

And when we published our paper that demonstrated that a race modified algorithm that looks at kidney function, known as the estimated glomerular function rate, we realized that our patient had both a black adjusted estimated glomerular filtration rate and a non-black adjusted.

And had we followed the non-black adjusted, she would have gotten placed on a kidney transplant waiting list so that she could get an organ. She would have gotten the medications that she needed on time. And she would have experienced a better quality of health. However, they followed the black adjusted value and it took 12 months later for her to get the care that she needed.

MUSIC INTERLUDE

You know, the question is how did we get here? How did we get to having race adjustment be significant in how we practice medicine? And it really goes back to this idea of essential difference. And that came from the idea that black slaves were both physically and mentally different from their white slave owners.

The thought was that black slaves had a different type of lung capacity than their white slave owners. And so we see remnants of that in the way that our lung function test can be modified black versus white.

 A lot of our studies and research has not been representative of the population who those diseases are impacting.

**For Octavia, laboratory medicine plays a huge part in tackling these disparities. It has the potential to really help to identify and fix the inequities that exist within healthcare.**

Many of the initiatives have been for us to find ways to diversify the individuals who enroll in clinical trials. And laboratory medicine really sits at the intersection of making that a reality. We have what we call leftover specimens or remnant specimens. And those are samples that have been submitted to the clinical laboratory for clinical testing. And then there's a portion of that sample left over and you can use them in an ethical and significant and directed way to answer a research question.

Remnant specimens allow us to start examining what is the foundation of the health disparity. Why is the health disparity occurring?

And that's what we've been doing, using these remnant specimens to look at how sepsis impacts various individuals, based off of age, based off of gender, depending on the type of infection you may have. And that may denote the type of treatment that you may need.

MUSIC INTERLUDE

It's so important that we unpack the way that we use race because race is not biology, it's a social construct, so that we can ensure that people get timely care and appropriate care. I actually wrote this quote down if you don't mind me trying to find it…

**It's a quote from a doctor who specializes in the diagnosis and treatment of kidney diseases, nephrologist and activist, Dr Vanessa Grubbs.**

She says: Going forward, we must question our decisions to center biologic science around constructs that, instead of having a biologic basis beyond superficial classifications around skin color and hair texture, are muddled with complicated and unmeasurable societal factors. Let's stop playing the race card like it's a genetic marker. It simply is not.

**Equity isn’t just about the care people get - it’s also about who’s in charge of that care. It’s important that the health workers in leadership roles actually reflect the diversity of the people they’re serving.**

When we have a diverse workforce, when we have diverse, not only thought processes, but populations represented, then the priorities can truly reflect the needs. Someone is going to think about something differently than you and to be able to have conversations is quite important. It builds  inclusion. It actually really leads to a healthy work environment.

If we say that there's a health disparity for a population yet we have no one in the leadership position, there will be no funds prioritized for that, there will be no strategic plans put into place. And we can imagine, if we think even closer down to the clinical lab, if you have a high population of individuals that have been diagnosed with sickle cell anemia, do you have the correct testing processes in place to ensure that monitoring for these patients are done very quickly and timely and they get the medication that they need?

Very important to have individuals that do represent the community that you're serving, so that you can have these priorities set in place and you're ensuring that you can deliver care.

So, how are we going to do that? We need to be more public facing. And so one of the things that my department has supported with me developing is called *Ask a Laboratorian*. And we've had the opportunity to go into the community and introduce ourselves as clinical chemists and pathologists, as clinical microbiologists, to have them tell us what they find important about being healthy. What does it mean to be healthy? What questions do they have about testing? Or disease? And how do they interpret their test?

And so, the fact that they will be building out their health literacy that we're able to be there for them to aid them in test interpretation and empowering them to be advocates for their own health is very important.

When we think about gender and leadership, I would be remiss if I didn't say what great women identifying mentors I've had throughout my career.

Having a woman mentor in this space also demonstrates that there's nothing I can't achieve. And so, it is important for us to think about when people see themselves in others, it does boost that sense of confidence. And it also tells you: If they can do it, I can do it too.

MUSIC INTERLUDE

**Octavia is dedicated to raising awareness in the medical field, especially as past president of ADLM, the *Association for Diagnostics and Laboratory Medicine*. It’s a scientific and medical professional organization dedicated to clinical laboratory science based in the US.**

I've had the opportunity to participate within the Association for Diagnostics and Laboratory Medicine to really illustrate the importance of representation. And we went a step further to start educating our members on what it means to practice laboratory medicine with a health equity lens. And so, serving our membership and then providing them the tool kit that they need so that they can be impactful in each of their own communities that they actually practice.

You can imagine that some of us practice in a rural area, some in an urban area. Many of us may only see adults, where some of us have pediatric populations and geriatric populations. And not only that, we have individuals with different languages. And so, being intentional about ensuring that we have the translation services. Or we have individuals that may have disabilities, how do we make sure that we're accommodating to them, so they not only get the care, but they also understand their test results.

  MUSIC INTERLUDE

All of the associations within this field, really have been focusing on what health equity means. How we as a field can identify health disparities and how we can lead that effort.

  MUSIC INTERLUDE

My commitment to health equity is because I am a black woman and I actually represent a population who has a high percentage of health disparities. But not only that, I am a human.

 I am hopeful that we understand that when we focus our work with a lens of health disparity, that we understand it's not one type of population that we're talking about, but everyone benefits from this.

**Looking ahead, Octavia hopes her message of equality and inclusion will turn into a lasting movement - one driven by advancements in laboratory medicine, and one that ensures everyone in society gets the accurate diagnoses and the medical care they need and deserve.**

I am hopeful that the work continues and that there will be real identification of health disparities and elimination of health disparities, and that's going to come with laboratory medicine leading the way.

It's really going to take us ensuring that we are the impetus of why diverse populations are being enrolled in the clinical trials. That we are representative of the communities that we're serving and that we are identifying biomarkers that really are going to lead to transformational therapeutic interventions for all populations.

And so I am hopeful, I'm excited, and continue to ensure that all individuals can experience the highest quality of health possible.

**VO - For a transcript of this episode or for more about Octavia Peck Palmer and her work, visit our website at** [**www.labmed.org.uk**](http://www.labmed.org.uk)**/podcasts**

**This podcast is brought to you by the Association for Laboratory Medicine. Produced and edited by Caroline Bacle, sound mixed by Daniel Fletcher. Special thanks to Avi Surskas and everyone in the LabMed team.**

**And we’ll be back next time for more stories of *Life in the Lab*.**

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