McMaster Program for Faculty Development (MacPFD)

Spark Podcast

Official Transcript

**Episode Number:** 11

**Title of Episode:** Bias in the Mirror with Dr. Sukhera | Health Equity in Research with Dr. Mbuagbaw

**Producer:** Nick Hoskin

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**Featured Guests:** Dr. Javeed Sukhera & Dr. Lawrence Mbuagbaw

**Interviewer:** Dr. Teresa Chan

**Date of original release:** February 17, 2021

**Dr. Teresa Chan (00:02):**

Welcome to the MacPFD Spark Podcast. This podcast is meant to inspire you to take the next step in your development journey as a faculty member, we're really excited to bring you all sorts of content from inspiring you to teach or supervise differently, to leading and managing your team, to thinking about new creative ways or humanistic ways to actually do your work and finally to up your game in your scholarly practice. Are you excited yet? I certainly am. So sit back, listen and enjoy this latest episode of the MacPFD Spark Podcast.

**Dr. Teresa Chan (00:39):**

Hello everyone, thank you to tuning into another episode of MacPFD Spark. February in Canada and in the US is known as Black History Month. And in honor of that, we thought we'd curate two talks from our archives that would be really important for everyone to consider and think about in terms of how we can up our game in healthcare with regards to racialized populations, and how we can bring more equity into the work that we do, so the first segment is recorded audio from a webinar that you can actually watch as well on macpfd.ca, it's by Dr. Javeed Sukhera, and he takes us through questioning the bias in the mirror, something that we all have to face when we're talking about how we interact with our patients, with our colleagues, with other people in the world. The second segment is by Dr. Lawrence Mbuagbaw, and he talks about health equity in research and how he's carved out a really amazing research agenda on this particular topic.

**Dr. Teresa Chan (01:41):**

Hello everyone. My name is Teresa Chan, and I am the Assistant Dean for the Program for Faculty Development here at the Faculty of Health Sciences at McMaster University. It is my esteem pleasure to introduce Dr. Javeed Sukhera, MD, PhD, and just all around great guy who is coming in to us from the really far off city of London, Ontario, that is. Which is about 100 collars away, so he's not actually that far way. But Javeed's been doing a lot of advocacy work and a lot of educational work actually with his PhD from University of Maastricht, where he explains the idea of implicit bias and its ramifications for medical education specifically. He has done a lot of advocacy work in his community as well, and works with the police force in London, and I'm just delighted that he was able to find the time to come and speak with us, I'm going to put the spotlight on him now, and so that he can talk to us a little bit about who he is and go from there, so I will ask him to take the stage and turn on his audio and go ahead.

**Dr. Javeed Sukhera (02:39):**

Good morning everyone, and thank you so much for the introduction and for the opportunity to speak to everybody, we'll move right into the talk itself. I really, really appreciate the opportunity to be with you all today, and I am going to share a little bit of my journey with you. So to start off, I don't have any disclosures. Other than that, I'm pretty sleep-deprived this morning, but I do wanna talk to you about my journey into this topic, so I came into medical education early in my career as a faculty member, I had come to Psychiatry and to Child and Adolescent Psychiatry in London after a career of really being interested in addressing issues of injustice, but it was early in my practice that I began working in a very busy emergency setting that this headline captures, and although this new story was riddled with some factual inaccuracies, it highlights and is intended to highlight the provocative nature of the question, if two people walk into our health system, one struggling with physical illness and one struggling with mental illness, do they both get access to the same high quality treatment?

**Dr. Javeed Sukhera (04:01):**

Well, for me, early in my career, that was a resounding, No, I watched as some of my patients, right in front of my eyes were blamed and shamed for their problems, I watched as we basically manifested a system that is beyond broken, that it was designed in a way that's completely upside down and not what these individuals and their families deserve, but what I also saw was really well-intentioned, highly professional colleagues who were part of the process, and it made me think about stigma or the treatment of people with mental illness and addiction as an equity issue. So I did what many people on this call and this talk do, I went into the literature and I learned that stigma is an example of prejudice and discrimination, that has significant negative impact on the health of people who experience it. You see, what happens is that even though stigma can exist in this society or it can exist in a systemic or structural way in our organizations, it can also get internalized and apply to ourselves, if there's a common stereotype about people with mental illness that everyone believes it over time gets applied to ourselves, so that if we begin to suffer, we begin to see ourselves as weak.

**Dr. Javeed Sukhera (05:26):**

And stigma's an example of discrimination that's actually empirically linked with suicide, because if someone gets to the point where they're suffering and they're struggling, and they're experiencing emotional pain and they blame themselves, they see this is their fault, then that can lead to tragic human consequences, but when I went into the literature, which again, we all do, I thought to myself that this is something we've tackled, we have hashtag campaigns, we're talking about it, there's a huge robust literature on stigma reduction or anti-stigma interventions, so why aren't they working? Well, I looked at the literature and I saw that there's three main ways that we fight stigma, one is protest, and I think the anti-stigma literature has a lot to say about the anti-racism literature, and protest is essentially calling it out, but the problem with protest is that it actually creates a defensive negative reaction, and it can worsen the prejudicial attitude if you call people out and they feel shamed.

**Dr. Javeed Sukhera (06:27):**

The other technique is something called contact or social contact, and that's the idea that instead of me teaching about it, it should be someone who has a lived experience of mental illness. And social contact can be very powerful, it's very effective, it can humanize people's stereotypes, but it has limitations too, it's only effective if the two individuals coming into contact with one another, are of equal status and power. And I thought to myself that residency education is a form of social contact, but if you're working in a high intensity environment where your primary contact with people in this group, is when you see people who are in crisis or struggling or suffering, then perhaps social contact can actually worsen stereotypes. And then of course, there's education. We teach that mental illness is real, that prejudice is bad, but education as we all know is not enough, it's not getting at the deeply held prejudices and discriminatory behavior we all demonstrate. So as we're thinking about that, I'm gonna take a video break.

**Brené Brown** (07:34):

How many of you are blamers? How many of you, when something goes wrong, the first thing you wanna know is who's fault it is? Hi, my name is Brené, I am a blamer. [laughter] I need to tell you this quick story. So this was a couple of years ago when I first realized the magnitude to which I blame. I'm in my house, I have on White slacks and a pink sweater set, and I'm drinking a cup of coffee in my kitchen. It's a full cup of coffee. I drop it on the tile floor, it goes into a million pieces, splashes up all over me, and the first... I mean, a millisecond after it hit the floor, right out of my mouth is this, "Damn you, Steve." [laughter] He was my husband. Because let me tell you how fast this works for me. [laughter] So Steve plays water polo with a group of friends, and the night before he went to go play water polo, and I said, "Hey, make sure you come back at 10:00, 'cause you know I can never fall asleep until you're home."

**Brené Brown (08:30):**

And he got back at 10:30, and so I went to bed a little bit later than I thought. Here I go, my second cup of coffee that I probably would not be having [laughter] had he come home, when we discussed. Therefore... [laughter] And so the rest of the story is, I'm cleaning up the kitchen, Steve calls, caller ID, I'm like, "Hey." [laughter] He's like, "Hey, what's going on babe?" "What's going on?" [laughter] "So I'll tell you exactly what's going on." [laughter] I'm cleaning up the coffee, that spilled all... " Doo, like dial tone. [laughter] 'Cause he knows... How many of you go to that place when something bad happens, the first thing you wanna know is who's fault is it? I'd rather it be my fault than no one's fault because why? Why? 'Cause it gives us some semblance of control. But here, if you enjoy blaming, this is where you should stick your fingers in your ear and do the na na na na thing, 'cause I'm getting ready to ruin it for you.

**Brené Brown (09:32):**

'Cause here's what we know from the research, blame is simply the discharging of discomfort and pain, it has an inverse relationship with accountability, accountability by definition is a vulnerable process, it means me calling you and saying, "Hey, my feelings are really hurt about this." And talking, not blaming. Blaming is simply a way that we discharge anger. People who blame a lot, seldom have the tenacity and grit to actually hold people accountable, because we expend all of our energy raging for 15 seconds and figuring out who's fault something is. And blaming is very corrosive in relationships, and it's one of the reasons we miss our opportunities for empathy, because when something happens and we're hearing a story, we're not really listening, we're in a place where I was making the connections as quickly as we can about who's fault something was.

**Dr. Javeed Sukhera (10:31):**

So this video is intended to highlight, that part of how we have this equity conversation involves a lot of finger-pointing. If you look at the questions for reflection that are posted, and ask yourself about the different social groups that you belong to, and ask yourself about which groups you might belong to that are visible or invisible, that are dominant groups, groups that might be privileged, how messages and experiences in our lives shape how we think about things. What Brene Brown highlights for us, is part of why a lot of anti-stigma or anti-racism interventions and education aren't as successful as they could be. It highlights the problem that too often when we're educating about these topics, the whole frame is set up to suggest that perhaps there's a good group of us who don't discriminate, and a bad group of us who do, and then perhaps education just involves getting all the good people to get the bad people to take a workshop.

**Dr. Javeed Sukhera (11:50):**

Now, as I'm sure you'll appreciate, that's just ridiculous, because the truth is that our brains are designed to objectify those who are different from us, our brains are designed to group people using heuristics and biases to organize information. But if our whole frame of education is pointing the fingers at one another because you don't get it and I get it, or if we're so obsessed with being right, that we don't focus on getting it right, then maybe there's an opportunity for change. So the idea that began my PhD work was, perhaps if instead of spending and burning all this energy pointing the finger at one another, maybe we start by looking in the mirror at ourselves. And that's where the idea came of looking at teaching and learning about implicit bias. One of the challenges about implicit bias is it refers to a concept where one might have a set of stereotypes or associations with another concept that exists at an unconscious level. So despite our best conscious intentions, we still may hold implicit biases that automatically influence us without our awareness.

**Dr. Javeed Sukhera (13:09):**

But what's complicated about implicit biases, first of all, not all implicit biases are destructive, and second of all, not all implicit biases are positive or negative, so we typically think of implicit biases or bias in general as negative attitudes that might have a destructive impact on patient care, which is the top right quadrant, but the truth is that there's a lot of negative biases that can be constructive. One of the examples that I can think of is safety, if someone walks into a large lecture theater with a weapon, we're instantly going to do what we need to do to keep ourselves safe, so there are negative biases that can be constructive, similarly, positive biases are when we have an affinity to a certain group or a concept, and those positive biases are actually really, really important because they foster a sense of connection and belonging, we tend to have an affinity for people who are similar to us, and that can really create really positive feelings, I think of in Ontario, Medical students all get backpacks when they start medical school, and I know that if a medical student sees another student with one of those backpacks even far away in an airport, there's instantly a connection with that person.

**Dr. Javeed Sukhera (14:34):**

When my father first moved to Canada, from Pakistan in the 1960s, he tells me a story that one of his first weekends in Toronto, he was having a hard time finding a place to rent, there were literally signs in windows that they were not renting to colored people, and he was walking on the street and he saw another gentleman who was Indian, and they both walked by each other, turned around and complete strangers ran up to each other and gave each other a hug, so not a whole bias is negative and not all bias is destructive, but similarly, positive biases can also be really prominent blind spots, and they can affect our clinical decision-making if we're rooting for a patient, we really want them to succeed, we can miss things, and these blind spots can be just as damaging and harmful to equity and patient care, why bias is an issue though, is because no matter how well intentioned we are, it still can have a very negative impact on our behavior, so this comes from a study where they looked at thrombolytic treatment for Black compared to White patients, and even though the physicians were consciously not racist, they didn't express anything other than consciously held egalitarian believes, they were still significantly less likely to prescribe this treatment for Black compared to White patients, and it was their implicit bias that was most correlated with their behavior.

**Dr. Javeed Sukhera (16:00):**

Why this matters is because we sort of convince ourselves that we are taking data and interpreting it, but all the data that we get from the world is filtered through our own beliefs, assumptions and experiences as we add meanings, draw conclusions. And the actions we take are not just based on the data, they're based on the data filtered through our own biases, but in healthcare, these biases have a profound impact on trust, if you were a member of a group who consistently, despite anybody's best intentions, experiences and perceives blame and shame from the system, then that makes you not trust the system. In fact, these biases are gonna perpetuate lack of self-efficacy, a lack of treatment adherence, and an erosion of trust in a system. And for all of us who work in healthcare, whether we like it or not, we are ambassadors for that system, so if others experience it, then people are sensitized to experience it from us, no matter how hard we try. So these biases influenced us and in our research and education, the idea was, Well, if the concept is to hold up the mirror to ourselves, then perhaps the first step in educating ourselves about our biases is to give ourselves feedback.

**Dr. Javeed Sukhera (17:29):**

And one of the tools that we can use to do that is something called the implicit association test. The IAT is a test of response time latency that's available online @implicit.harvard.edu, and so the first series of studies we did, we looked at how health professionals process and integrate feedback about their biases using the IT as an elicitation tool. And we were a little surprised at what we found, our research went a little bit sideways, feedback about bias was actually a very different type of feedback, it wasn't that learning that we're biased was discrepant with what we believe about ourselves, 'cause we all know that if we get feedback that isn't consistent with what we think about ourselves we tend to discard it. Feedback that we were biased was actually inconsistent with an idealized version of ourselves that was impossible to achieve.

**Dr. Javeed Sukhera (18:30):**

So when health professionals were confronted with their biases, their response was, Well, I can't have bias, and this test is stupid, because I can't have bias, I'm a professional, and professionals don't have bias, they were aspiring to something that was impossible, yet they also reflected that, of course, I have bias because I'm a human being, and we all have bias too, this finding really made me rethink what we were doing because what it suggested was that in healthcare and perhaps in society at large, we encourage people to compartmentalize our identity and this compartmentalization can have very significant implications for how we teach and learn about sensitive topics, like bias, stigma, racism.

**Dr. Javeed Sukhera (19:22):**

So we went even deeper, we thought if identity has a lot to do with this, let's do a series of studies in a group for whom their very identity is caught up in not expressing this kind of attitude, let's look at mental health professionals, and their bias is about patients with mental illness.

**Dr. Javeed Sukhera (19:40):**

So in a series of studies, what we highlighted is a paradox in the feedback literature, so we know in health professions education that we're taught to not give people feedback about themselves, about the self. If we give people feedback about the self, feedback intervention theory suggests that that hijacks the feedback process, and so we're encouraged to give people feedback about what they did, but here is an example of feedback that cuts to the core of someone's very being, it's feedback that highlights to them that they're flawed and they have shortcomings, so it was interesting that this is inconsistent with the feedback literature, participants said, "This test is stupid," They denigrated the test, they said it was rigged, yet it didn't hijack the process, these same very participants in the same interviews were able to reflect that this feedback was important and that this feedback was actually actionable.

**Dr. Javeed Sukhera (20:40):**

In one of our studies, we used Rich Pictures, which is a visual methodology that gets people to engage in deeper reflection about their responses, and in one of our Rich pictures, this was someone who described how they themselves had struggled with anxiety, and even though they worked to reduce stigma and encourage their patients to speak up against stigma, they felt like there were two parts of their brain, one part that told them to not be ashamed of themselves, and another part that just told that part to shut up, and so this study and these studies highlighted for us that the process of reconciling the tensions about our flawed selves really requires striving to be that best version of ourself while accepting our inherent shortcomings and vulnerabilities. In another study, we did training, and then we didn't just do a pre-post, we actually did a longitudinal follow-up with participants within a particular learning environment, and what we found in this study was not just that the bias training or getting people to confront their biases, had an impact at the individual level, but as you can see, if you're teaching and learning in a quick fix culture, and there's an implicit bias that say, "People with mental illness are un-fixable," That leads people to implicitly avoid these patients, and that makes people feel helpless and frustrated because we as health professionals don't avoid, we wanna feel effective.

**Dr. Javeed Sukhera (22:09):**

Simply making people aware of their biases or confronting their biases alone actually created the role tension I talked to you about and made people more helpless and frustrated. It didn't help to just know that we had biases, because if you take a group of hard working people who have high standards then say, "There's this thing called implicit bias, and it's gonna affect you despite your best intentions," That's gonna lead a lot of our learners to just say, "Well, I give up. What can I do?" But it wasn't until we actually translated the education into action, we focused on managing those biases, changing our behaviors, that people actually began to critically reflect on the system, the structures, their explicit attitudes changed, and by role modeling it with peers, they actually began co-constructuring structural change within their environment. A great example of that was early on in our longitudinal follow-up, participants said that the training was great, but that they're going back to the same environment where they're metriced and things are sort of baked into the system, they're embedded into hospital culture, but then a few months later, these same participants said, "You know, there's something about this training that didn't just make me confront the biases in myself, it made me more comfortable about opening up about my vulnerabilities with my peers, and it made me take a critical lens to how bias is baked into the structures."

**Dr. Javeed Sukhera (23:45):**

One participant specifically described how they saw policy in the hospital about triaging and assessing violence that they thought was highly discriminatory, so the training was set up to inspire them to not just change themselves, but to speak out and change the policy, and structure within the hospital. What this highlights is that if done correctly and done in a theory-informed way, education alone will never be the solution, but education alone can empower people to critically change structures and policy within the system, and being a role model was a key part of the reinforcement of the learning, so as we bring this all together, and we think about this idea of us versus them and the energy we spend pointing the finger versus looking in the mirror at ourselves, what I think a lot of our research highlights is a problem within our culture of training, and I say that that problem is a toxic perfectionism, if we're teaching people to try to be a fantasy version of themselves that's impossible to achieve, then are we really gonna be able to move the needle? And are we really gonna be able to tackle some of these wicked problems?

**Dr. Javeed Sukhera (25:03):**

The model that came out of our work highlights that you can look in the mirror and get feedback about your biases, and you can reflect critically on your role and how those biases may negatively impact your objectives of high quality patient care, but it isn't until you set new goals and actually explicitly role model an anti-stigma, anti-bias or anti-racist behavior, that change can begin. All of that is built upon sharing and dialogue with peers. Now, our training was effective in some settings and it wasn't effective in others, and one of the critical ingredients, the secret sauce to making it effective was in settings where people who learned together, worked together across professions, those colleagues became social re-enforcers for one another. The other thing is how we set up the frame, if we frame this as a one and done, it's not gonna work, this is a constant iterative process and if we frame this as... Something that we are working towards a kind of toxic perfectionism.

**Dr. Javeed Sukhera (26:12):**

And that's also going to be problematic. So we have to set training and teaching up about these topics with the emphasis that we can strive to be better, we can strive for that ideal version of ourselves. But unless we balance that striving with conscious accepting, and in fact embracing of our imperfect and vulnerable selves, we're not going to be able to move the needle forward. There's a lot of literature on bias reduction, lots of things, mixed findings for some effectiveness for others. But the way that I try to distill how we can do this, really is around three major themes. And the first of those is courage. Now, it's not just courage to imagine what stereotypes we have and to work on modifying those. I'd say it's courage to confront our imperfect selves in the mirror, and it's courage to speak up about the biases within the system. Now remember the norms of our system are biased, so if any of us speak up about bias, it's going to be scary.

**Dr. Javeed Sukhera (27:17):**

When I teach medical students about this, they talk about the hierarchy, how they feel low, how they're afraid of retribution, and I tell people that you shouldn't expect anybody to step into territory that feels too vulnerable or scary, but at the same time, it's not just that we want to create safe spaces for learning. We want to create brave spaces, where we encourage others and ourselves to tiptoe over that comfort line and have the courage to speak up. Compassion really highlights that in order for us to not see one another as stereotypes, we have to see each other as complex human beings, as people that aren't just labels, and we can do that through individuation, through mindful practice, but none of this compassion will ever happen if we don't have compassion for ourselves. I'm sure you'll agree that we do tend to be hard on ourselves in our professions, and this I would argue, is toxic to the process of moving the equity that we need forward. If we are gonna to have the courage to look in the mirror at our imperfect selves, we have to have compassion for that self and have the capacity for self-forgiveness, and then connection is the key to this. What do we do when we're encountering change? What do we do when we encounter groups that are difficult or challenging or conversations that are difficult or challenging?

**Dr. Javeed Sukhera (28:49):**

We are designed to step away and avoid, but it's only by leaning in to these difficult conversations, particularly with groups that we may struggle or not have contact with, that we can move our own understanding forward, and it's by actively seeking connection that we can make that happen. But none of this is gonna work if all we do is focus on individuals. In medical education and healthcare in general, we have a tendency to take very wicked, systemic, and structural problems and try to address them by throwing people into trainings. It's not gonna work. If we're gonna address bias at an individual level through awareness, motivation, and action, we have to ensure our organizations are doing the same and that shouldn't be done in an us versus them, me versus the organization way. We need to remind ourselves that we co-create the spaces in which we exist. We are part of the system, and we are part of the solution. So as we change ourselves, we have to change the structures and policies within our systems. So with that, I'm gonna conclude with a video that bookends my presentation and then hopefully we'll have some time for a chat.

**Brené Brown (30:09):**

So what is empathy? And why is it very different than sympathy? Empathy fuels connection. Sympathy drives disconnection. Empathy, it's... Very interesting. Theresa Wiseman is a nursing scholar who studied professions, very diverse professions where empathy is relevant and came up with four qualities of empathy. Perspective taking, the ability to take the perspective of another person or recognize their perspective as their truth. Staying out of judgment, not easy when you enjoy it as much as most of us do.

[laughter]

**Brené Brown (30:43):**

Recognizing emotion in other people and then communicating that empathy is feeling with people. And to me, I always think of empathy as this kind of sacred space. When someone's kind of in a deep hole, and they shout out from the bottom and they say, I'm stuck. It's dark. I'm overwhelmed. And then we look and we say, Hey, calm down. I know it was like down here. And you're not alone. Sympathy is, ooh, it's bad. Uh huh. No. You want a sandwich?

[laughter]

**Brené Brown (31:24):**

Empathy is a choice and it's a vulnerable choice because in order to connect with you, I have to connect with something in myself that knows that feeling. Rarely, if ever does an empathic response begin with at least. I had a... [laughter] Yeah. And we do it all the time. Because you know what? Someone just shared something with us. It's incredibly painful. And we're trying to Silver Lining it. I don't think that's a verb. But I'm using it as one. We're trying to put the silver lining around it. So, I had a miscarriage. Oh, at least you know, you can get pregnant. I think my marriage is falling apart. At least you have a marriage.

[laughter]

**Brené Brown (32:08):**

John's getting kicked out of school. At least Sarah is an A student. But one of the things we do sometimes in the face of very difficult conversations, is we try to make things better. If I share something with you, that's very difficult, I'd rather you say, I don't even know what to say right now. I'm just so glad you told me. Because the truth is rarely can a response make something better. What makes something better is connection.

**Dr. Javeed Sukhera (32:38):**

Alright, so thank you.

[music]

**Dr. Teresa Chan (32:42):**

While some podcasts have commercials in our podcast, we have some product placements about our own events, and so this is a cognitive break to raise awareness of a really cool opportunity. So we've just announced that our 14th day in faculty development will be on May 25th, 2021, so mark your calendars for that, registration isn't open yet, but definitely consider submitting something to our abstract competition. The abstracts are due on February 28th, 2021, and you can submit in four different categories this year. Thanks to co-chair Dr. Ruth Chen for highlighting how we can engage each other within this community of practice that we're developing. So number one, if you'd like to explore new ideas with us, there's a great ideas track where you can present your great idea for something in faculty development and get feedback from the crowd. And so this is called The Great Ideas track, and it's for 15 minute presentations for really early works in progress, like where you've just had a cool idea and you wanna see if it's gonna stick, the second category is to develop, and so this is where you may have something you want to help develop in others, these are for workshop proposals and therefore 45 minute slots and where you need to actually just articulate what problem and approach you have for solving that problem or going beyond and helping people develop themselves.

**Dr. Teresa Chan (34:06):**

The third kind is to inspire, and these would be reporting of new concepts and ideas, these would be for cool programs that you've been able to develop in this new pandemic world that we're living in and reporting new evidence of success or new initiatives that you've been able to kick start during this awesome time, and the last category is going to be to celebrate, and so if you have a great success story or a cool innovation that you think that other people could actually learn from, go ahead and submit that. Those are eight minute abstracts, and it's just a quick run through about a cool, cool idea, so definitely come and share your ideas with us. I think it'll be a really exciting time.

**Dr. Teresa Chan (34:51):**

Hello everyone, this is the MacPFD Spark Podcast, and I'm excited to have a colleague Dr. Lawrence Mbuagbaw, who is a faculty member in the Department of Health Research Methodology, Evidence and Impact, and he is someone who is currently doing some very interesting work around health equity in research so I thought I'd bring him on the podcast to speak about that. Hello, doctor can you say hi to everyone please.

**Dr. Lawrence Mbuagbaw (35:17):**

Hello everyone, I'm Lawrence Mbuagbaw, Associate Professor in the Department of HEI, and I'm happy to be here today with Teresa.

**Dr. Teresa Chan (35:25):**

Excellent, okay, well, Lawrence, can you tell me a little bit about what you think is the importance of health equity in research? Let's start there. How did you get to this part of your career? 'Cause you didn't always start out doing this straight off the bat did you?

**Dr. Lawrence Mbuagbaw (35:39):**

No, not really. It came naturally in the sense that I am an epidemiologist and a research methodologist, and part of epidemiology is looking at how health and health outcomes are distributed among populations, and then as a methodologist I started looking at how we can investigate these distributions, and you would discover that health outcomes vary across populations, and sometimes these differences in health are unfair and unavoidable and those are health inequities.

**Dr. Teresa Chan (36:15):**

Okay, and so those health inequities, I think we've seen manifest because of COVID, especially the pandemic has revealed a lot of those inequities, and so I think your work has become so timely now, and I'm so glad that you're sharing with everyone, but can you take us through what are some things that if you're a researcher listening to this podcast, what are some things that you could think about to bring a lens of health equity into the work that you're doing so that you don't have to do it all the time, but there are probably practices that you can think of that everyone could bring into their research?

**Dr. Lawrence Mbuagbaw (36:46):**

Thanks, I agree with you that it's not in all instances, and with all research questions that equity is relevant and not all research is designed to respond to equity questions, but what would help researchers is to think of health inequity in terms of a framework. If you don't think of the issues that can be affected by health inequity or the things that could lead to health inequities, and then they're very easy to miss. So, one framework which I recommend is the PROGRESS Plus framework is an acronym for a place of residents, race, ethnicity, culture, language, occupation, gender or sex, religion, education, social economic status, social capital, and other contextual factors.

**Dr. Lawrence Mbuagbaw (37:34):**

Now, as a researcher, the first thing you need to do when you're designing your study is to avoid aggravating inequities, by this, I mean people should not be unduly excluded from studies simply because they do not speak the language the investigator is comfortable with or because their level of education does not permit you to communicate effectively with them, impetus is on the researcher to design study materials and to translate study materials such that people of all minority groups can be reached and included in studies.

**Dr. Teresa Chan (38:10):**

Alright, that's great. And for those of you who are interested in this, one of the places you can turn to is actually the Cochrane Group has a page on this, so if you go to methods.cochrane.org/equity, you'll actually find that there is an opportunity for you to look into some of these resources, they have extensions of commonly used platforms such as equity checklists, and that can be attached to Prisma or to Consort, and so these are probably something that you can look into yourself as well, but the Progress plus framework is definitely searchable, if you put Cochrane PROGRESS-Plus, they have a whole page on it and has all the citations, so that's definitely somewhere where you can look for more information. But Lawrence, what do you think are the hardest parts of bringing some of these equity lenses to the work that people are doing? Why do you think people would have trouble with it?

**Dr. Lawrence Mbuagbaw (39:03):**

One of the biggest challenges is collecting information on health inequities, because, as I mentioned with the PROGRESS-Plus framework, that's already close to nine variables that you need to add to your case reporting form, so that creates challenges for some people, and then there are a lot of these vulnerability factors which are not well-operationalized. Example, if you're trying to capture socio-economic status, you could do it by looking at where the person lives, because there are certain area codes that... Could also do it by asking the person exactly what their income is. And there are many other ways of trying to estimate socio-economic status, and it's not always clear which is the best approach to do it, so people have concerns with collecting that sort of information, and then there's also the challenge with getting a clear distinction between gender and sex. The researchers often find that it's challenging to distinguish between the two, and they often don't have data on gender, so people tend to work with sex, even though many of the differences we find in health outcomes are related to gender and not so much related to sex.

**Dr. Teresa Chan (40:18):**

Yeah, so gender definitely is a more of a social construct as opposed to the X and Y chromosome makeup, I guess, is what you're getting at.

**Dr. Lawrence Mbuagbaw (40:27):**

Yeah.

**Dr. Teresa Chan (40:27):**

And I would assume, especially in Canada, we don't measure people's perceptions of their race or gen... Their racial identity, as much as in other jurisdictions. I know in the US, it's more common to do that. What are your thoughts on integrating those questions into research?

**Dr. Lawrence Mbuagbaw (40:43):**

So up till recently, ethnic data has not been collected from certain surveillance reports, and this is a concern because we have identified disparities across ethnicity lines, so a number of institutions have started collecting gender data. I know, since 2017, I believe the epidemiology units have started collecting gender data when they're doing HIV testing as well, just so that we have that information and we can use it to inform policy and practice. I think it's important to capture this information because the only way to act upon these inequities is actually collect information about the inequities, trying to understand them, then whatever interventions we do can also only be evaluated if we have actually collected information on them. So I think it's important for us to capture some of this information and use it in our research.

**Dr. Teresa Chan (41:37):**

Okay, alright, so I think that what you're saying is that we don't measure it, we can't find the inequities, and if you're an equity-seeking researcher, it might be that you have to find a way that doesn't obviously put your patient or your participants in this study in undue risk, but that if we don't measure some of these things, that we'll never know if there is a disparity that we could fix in our systems or in the way that we deliver healthcare. Is that correct?

**Dr. Lawrence Mbuagbaw (42:03):**

That is correct, and I will also add that for people doing primary research, it's important not only to collect this information but also to report disaggregated findings, because for the people who would be doing systematic reviews and evidence synthesis, we'll talk about that later, they will need to find aggregated information and pull it together. So if I was to go into primary studies and I'm trying to look for information on say motivational interviewing to improve outcomes in women, and the results of this trial are not disaggregated by sex and gender, and then I can't find that information, so it's important to collect and report information disaggregated by some of these factors.

**Dr. Teresa Chan (42:47):**

And so would you then plan for some of these factors then in your power calculations? I guess you have to account for looking at these intersectionality in your data, what does... Does it change the amount of patients you might need to enroll or the... And the participation that you would expect you need?

**Dr. Lawrence Mbuagbaw (43:03):**

There are a number of ways of going about this. The first is determining if you are conducting equity relevant research or not. If you're not conducting equity relevant research and then you wouldn't be collecting this information. If you're collecting equity relevant research, there are two ways in which you can do it. One would be to look at the contrast between the people experiencing the inequity and the people who are not, or to conduct a study only on the people who are experiencing the inequity. For example, you can conduct a study including only ethnic minorities, you can conduct a study looking only at women or a study in people with low levels of education. If you're looking for that contrast and then you absolutely need to be powered to make that comparison. The first step is to be able to report the information in a disaggregated fashion, and then you could potentially do more sophisticated analysis and look for interactions between your outcomes and the levels of inequity.

**Dr. Teresa Chan (44:00):**

So what you're saying is that maybe at first you should collect the data, dis-aggregate it, see if there's a signal there that maybe it's a secondary analysis, maybe it's something that you do post-talk. But then if you think that there might be a signal, go and confirm it. Dive deeper into that study, maybe focus in on a minority group that may not have benefited from a focus in the previous, and then see if there's more of a signal. Is that correct?

**Dr. Lawrence Mbuagbaw (44:23):**

I think for the most part, if you find a signal, it'll mostly be hypothesis-generating, and then in the future, you could conduct a larger study that is powered to actually explore this, or somebody who's doing a systematic review can pull data from your study and other studies to increase the statistical power to make the appropriate inferences.

**Dr. Teresa Chan (44:42):**

That's great. So you're describing how health equity, if you fold it in, can lead to further scholarship, further research, and actually be maybe a path that someone could carve out. So if you're running a lab, it might be that one of your PhD students or someone doing their Master's might be able to explore that in a more dedicated fashion, so you might be able to carve out a niche for someone else to pursue it, if you're a CVS researcher or a sepsis researcher or someone that has a big lab of people running around doing different studies, you might be able to then have different folks focusing... I think that we've had very successful researchers who focused on gender differences and ethnicity-driven kind of focused needs of certain populations, Dr. Sonia Nand has done a really great job at carving out some of these issues within her research portfolio, and I do think that it's probably a form of dedicated scholarship that we can pave a way and create structures to be able to allow people to flourish and contribute to the world that we live in right now, in that way.

**Dr. Lawrence Mbuagbaw (45:42):**

Absolutely. And one key piece which I might add to people doing primary research on health inequities is stakeholder involvement. If you're going to be doing research on ethnic minorities for ethnic minorities, should be done by ethnic minorities with ethnic minorities for their benefit. So it's important to ask them what their lived experiences are, what the research questions are they want to see answered, and they will help you to inform your research question. And ultimately, the dissemination and uptake of your findings depends on people being involved in the process from the inception of the research question. So, stakeholder involvement is a key piece of research on health inequities.

**Dr. Teresa Chan (46:28):**

Okay, so I think those are really good pro tips, and I'm really fascinated with what this could... It's just my mind is exploding with new ideas, [laughter] I have myself on some of the work that we could do. But if someone wanted to read more about it, we've mentioned the Cochrane Review page, but do you have specific paper that you might wanna suggest to everyone that they could dive into if this sparks their interest in that they wanna pursue this more?

**Dr. Lawrence Mbuagbaw (46:54):**

Absolutely, I think a good resource would be to look at the initial paper describing the PROGRESS-Plus framework, and then there is the consort extension for equity-relevant trials, which will be helpful, and then we are currently working on an extension to the strobe guidelines for observational studies. You could also look at the Prisma extension for equity-relevant systematic reviews.

**Dr. Teresa Chan (47:19):**

Alright, can you just spell the name of that first person so that everyone can look it up? The author that wrote PROGRESS-Plus.

**Dr. Lawrence Mbuagbaw (47:27):**

Jennifer Oneill, O-N-E-I-L-L.

**Dr. Teresa Chan (47:32):**

Perfect, okay. Well, thank you so much for spending the time with us to explore this topic, and again, we're hoping to inspire some people to spin their heads in a different way and maybe do a slightly different approach and expand what they're doing to meet the needs of the diverse populations that we serve, so I really appreciate you taking some time in your busy day to talk with me about this, and we'll bring you back another time to talk about knowledge of disease and systemic reviews and meta analyses, and how health equity might be folded into those.

**Dr. Lawrence Mbuagbaw (48:01):**

Wonderful, thank you so much for having me, Theresa.

[music]

**Dr. Teresa Chan (48:06):**

Thank you so much for tuning in to the MacPFD Spark Podcast. Just so you know, this podcast has been brought to you by the McMaster Faculty of Health Sciences and specifically the Office of Continuing Professional Development and the Program for Faculty Development. If you're interested in finding out more about what we can offer for faculty development check out our website at www.macpfd.ca that's www.M-A-C-P-F-D.ca. Many of our events are actually web events that are free. Finally, I'd like to thank our sound engineer Mr. Nick Hoskin who has been an amazing asset to our team, thanks so much Nick for all that you do. And also thank you to Scott Holmes for supplying us the music that you've been listening to. All right. So until next time this is MacPFD Spark signing off.