

Aging Fast & Slow Podcast

Episode 3 - Kidney Health Equity: We're All Invested

Dr. Sarah Szanton ([00:03](#)):

Welcome to episode 3 of Aging Fast & Slow! We are Dr. Sarah Szanton

Dr. Deidra Crews ([00:08](#)):

and Dr. Deidre Crews, your hosts.

Dr. Sarah Szanton ([00:12](#)):

We have a great episode in store. In honor of March being National Kidney Month, we've decided to highlight Aging Fast & Slow's own Deidra Crews, a nephrologist at Johns Hopkins. Dr. Crews is the Associate Director for Research Development at the Center for Health Equity, along with many other appointments. Her core area of research addresses disparities in the care and outcomes of chronic kidney disease. She has examined the contribution of social determinants of health, including poverty and access to healthful foods, to disparities in kidney disease.

Dr. Deidra Crews ([00:48](#)):

Wow. It's really exciting to be on the other side of being a host and to switch roles today.

Dr. Sarah Szanton ([00:55](#)):

It's great to have you. So to begin with, what does the term health inequities mean to you?

Dr. Deidra Crews ([01:02](#)):

Well, when I think about health and equities, for me it's really all about fairness and justice. When I think about health equity right everyone has a fair shot at achieving their best health. When I think about health inequities, it's really all about those barriers standing in the way of someone having their best health or experiencing their best health. When you think about it, it's a matter of justice. When we see that there are so many groups that historically have faced these sort of barriers, including racial and ethnic minorities, people with low incomes, people who live in rural communities, in many cases people living in urban communities, as well where different goods and services may be structurally partitioned off in such ways that they have difficulty accessing them – then, it really is a matter of justice and you have to think about, well why is it that those things exist? So that's what I think of when I think about health inequities.

Dr. Sarah Szanton ([01:57](#)):

And when you say structural, do you mean partly the built environment but partly access to things, and racial discrimination, and other structural components of the society?

Dr. Deidra Crews ([02:08](#)):

Yeah, when I think of it, I think of it quite broadly and I think that's where the science is as well in terms of thinking about things that are physical structures, but also things that are societal and sort of cultural structures that leave certain groups in position to be able to achieve their best health and other groups in position to not. When we think about physical structures, yes, those are. I like to think of them as

goods and services that might be health promoting whether it's having access to healthy food, having full service supermarkets in communities, having green spaces that would promote exercise. But then there's also social structures and around that, I mean, where certain groups are viewed in certain ways. I see those as being structural inequities as well, when people and organizations that are in power have set up structures such that certain groups experience these sort of inequities.

Dr. Sarah Szanton ([03:02](#)):

Wow, that's so important. And within that, why focus on kidney inequities and kidney health inequities?

Dr. Deidra Crews ([03:10](#)):

Kidney health inequities are incredibly profound. When we look at, for example, African Americans in this country, the rates of kidney failure that we see are more than three times of what we see among whites. When we look at Hispanics, it's more than 50%. And when we look at people who have low income levels compared to those who have high income levels, their chances of developing kidney failure are twice as high. And so they are profound, and that's one reason to focus on them. Another one, that I don't think gets enough attention, is that they're incredibly costly. So we know and we look broadly - really across all health inequities - we know that they are incredibly costly. There was one estimate that each year the United States is spending more than 30 or so billion dollars on health inequities, meaning that if we narrowed those that we would be able to save that amount of money.

Dr. Sarah Szanton ([04:05](#)):

Because we would be having fewer hospitalizations and more worker productivity -

Dr. Deidra Crews ([04:11](#)):

Exactly. And so in kidney disease, it becomes really important, because we are all in when it comes to the coverage of end-stage kidney disease. So unlike most chronic conditions, if a person does develop kidney failure, they become automatically eligible for Medicare regardless of age. Even a 20 year old that develops kidney failure automatically becomes eligible for Medicare. That means at a societal level, we're all invested in making sure that the care for people who develop advanced kidney disease or kidney failure is equitable, and it's high quality, because we are covering the cost of that. Focusing on the type of care that gets delivered and making sure that it is both equitable and to the standard that we know is going to portend the best outcomes becomes really something that the entire public here in the U.S. should be focused on.

Dr. Sarah Szanton ([05:04](#)):

So we can prevent people from needing dialysis.

Dr. Deidra Crews ([05:07](#)):

Absolutely. So that we can prevent people from developing kidney failure. And then also for those who already do have advanced kidney disease or have kidney failure, making sure that they are also being well supported because one of the most costly parts about their care are the hospitalizations that many of those individuals will be required to have.

Dr. Sarah Szanton ([05:27](#)):

Right, wow. Well so one thing - I've known you for a long time - and one thing I've always been so interested in is that you do both epidemiologic work and intervention work, which I do too, and there aren't so many people who do both. Can you tell us what epidemiology is, and what interventions are, and how they can answer different scientific questions?

Dr. Deidra Crews ([05:58](#)):

Yeah, so that's one of the great things about our friendship is that we do share these types of disciplines. When it comes to epidemiology, I usually kind of think of it - and I think mostly give it - as the study of disease trends and populations. I started off my career getting trained in epidemiology and sort of the methods around tracking disease trends among different populations. I had an early interest in looking at health disparities with a particular focus on kidney disease and looking at both racial and ethnic as well as socioeconomic disparities. I think the field of epidemiology as it is applied to health disparities is one that we've known for many years, I would say, two, three decades at least about many of these health disparities that exist in the United States and really indeed across the world. There have been fewer, though, individuals who have sought to develop interventions or test interventions that are addressing those disparities. In more recent years, there have been more people who are pursuing that and it's been, I think a really exciting time. I continue to apply what I've learned through my work in epidemiology and sort of understanding who's at greatest risk for adverse outcomes when it comes to kidney disease or even those who are at risk of developing it in the first place, to then figuring out who to target in interventions. I think that's where the two kind of relate very nicely, because with limited resources for conducting this type of research, it's important to try to go after those people where the return on the investment that's being made through the research is going to make the most sense.

Dr. Sarah Szanton ([07:28](#)):

Interesting. When you say target, you mean aim the resources and the understanding towards the people where it's going to matter the most?

Dr. Deidra Crews ([07:39](#)):

Yeah, that's the way I think of it. Meaning for example, in my early work, one of the things that we were able to identify is that when we think about racial and ethnic minorities and we also look at socioeconomic status, what we found was that people who were both minorities and they had low incomes, had an amplified risk of developing kidney disease even compared to someone who was a minority but had a higher income, for example. For me, that was elucidating in that that identified that if our work could focus on racial and ethnic minorities who had low incomes, then we could potentially really have a great impact as far as reducing their risk of kidney disease. And so that's what I meant by target. But I also think it's very important to, once identifying that group, to engage them in the development of the intervention. That's why some of my more recent work has been in partnership with those groups of individuals who may be most affected by some of these conditions, again, in my case with a focus on kidney disease.

Dr. Sarah Szanton ([08:37](#)):

The research that you just pointed to, it's so important to be able to tease out race and ethnicity from socioeconomic status, and when they go together, and when they don't. Because there's so many studies that do not set up their sample in a way that they can and you can learn different things. Do you have a favorite study that you've done?

Dr. Deidra Crews ([08:52](#)):

Well, it's hard to pick a favorite.

Dr. Sarah Szanton ([08:57](#)):

I know.

Dr. Deidra Crews ([08:57](#)):

But I would say - because it really culminates a lot of the epidemiologic work as well as some of the qualitative research work that my colleagues and I have been able to do - probably my favorite study is the one that we have ongoing right now, which is the 5 Plus Nuts & Beans for Kidneys study. It is one of the studies of our Center for Health Equity here at Johns Hopkins. It is a dietary intervention study that's focused on African Americans who have early kidney disease and also have hypertension. It's allowed for us to really be informed by what we've learned through our epidemiologic work as well as what we've learned from our community partners as far as, you know, what sort of makes sense and what would really be beneficial for people who are dealing with both hypertension and kidney disease. And so if I had to pick a favorite, I'd have to say it's that one.

Dr. Sarah Szanton ([09:48](#)):

Well that's great that a favorite can be one you're still doing right now. You've talked a little bit about structural factors, and then there's individual choices and access. How do we move away from just focusing on individuals - whether they're buying the right groceries or not kind of thing - to more structural factors that would have more impact, but retaining our ability to actually intervene on individual people's lives?

Dr. Deidra Crews ([10:13](#)):

Yeah, so I think it's kind of a million dollar question in many ways. I would say really working with those individuals that are most affected by the structures right, to then try to move the dial on the structures. Part of our challenges is that we - certainly in the academic space - we work in these silos where we're not reaching out and trying to partner with people who are in positions to actually make structural changes. By that I'm speaking of people who are in positions of- they're policymakers, or they're healthcare system leaders, or they're in industry. When we think about you know our work, when it comes to healthy food access, thinking about grocers: what is the local kind of food environment look like and where are there opportunities to make structural changes in that? What sort of levers do we need to pull on in order to see those changes happen? So to have those of us that are thinking about it from an academic standpoint reach out and partner with those groups, I think is one important place. And then taking the stories of those individuals affected by those structures is a really exciting avenue as well, and that's something we're also trying to do in the context of our current study. For those participants who for a number of reasons weren't able to be a part of our actual intervention study, we're actually inviting them to provide us some insights about their environment that we can then use to reach out to some of these different groups.

Dr. Sarah Szanton ([11:39](#)):

And you mentioned greenspace earlier, are you looking at all at green space and kidney disease or you were just talking about that as a possible structural factor?

Dr. Deidra Crews ([11:47](#)):

I think that would be a really interesting thing to do in terms of looking at kidney disease. I was speaking of it as a general sort of structural factor. I haven't seen that and looked at. There's not been much work on physical activity and kidney disease. I do think that would be a really interesting area though. I think there's more to the provision of green space than just it being a place for people to exercise. I think it's also a source of stress reduction and social capital.

Dr. Sarah Szanton ([12:10](#)):

There's even interesting work out of University of Pennsylvania about green space and crime reduction. So, you and I both really interested in racial inequities. A large part of that comes from the history of slavery, and the social structures that didn't just disappear when slavery ended, and that a lot of our science is based on that period and people just tinker with it. And one example of that is that when you look at pulmonary function, which is lung function, there is a calculator inside it to change it based on if you're black or white, which is from some racist science at the time that we pretty much know that shouldn't be. But in kidney health, in what's called the glomerular filtration rate, which is a measure of how well kidneys work, also you put in if someone's black or not, which seems to also be problematic since there aren't really biological differences. Since you're our reigning nephrologist in the national kidney month, I wondered if you could help us understand the science behind that.

Dr. Deidra Crews ([13:11](#)):

This is an active area of discussion and consideration. As you mentioned in that equation, what we use for estimating kidney function, we do have a correction factor, if you will, for if a person is of black race. In terms of deriving that correction factor, there was a population of individuals who was relatively racially and ethnically diverse, and what was found was that the group that was of black race did have kind of a different curve, if you will, as far as what their kidney function was. Out of that, this correction factor that we've used has come into play. What we're seeing now is that, as scholars are taking a more careful look at that, we're beginning to understand what could be potential consequences of that, including anything that we use in the sort of clinical kidney space anytime we're using that number to guide our treatment patterns. A classic example would be when we're deciding when to refer a patient for transplantation. In really just the last couple of years it's been called into question, whether that factor, that glomerular filtration rate, could be swaying us to refer groups of some racial and ethnic backgrounds towards transplantation earlier than others. It really is an active area of investigation and query. As you know, I think the discussions around that are going to be ongoing.

Dr. Sarah Szanton ([14:34](#)):

Right wow, that's fascinating. Well, one of the questions we like to ask all our guests, as you know, is what's one of the best pieces of advice you've ever gotten?

Dr. Deidra Crews ([14:44](#)):

Oh goodness. So many. I think, on a personal level, one that has with me since I was pretty young - it's a quote actually that I keep in my office - and that is, "To try is to risk failure. Not to try is to guarantee it." The best example of that is thinking about - and something that I read a couple of years ago - and that was an investigator, she's an academic who actually tried to achieve, as she referred to it, 100 rejections in a year. And I thought, "Huh, that's interesting," and I thought, "I'll try it." And so I've actually been keeping a tracker and trying to get to 100 rejections. And I think what that does is it forces you to go for things that you might not have otherwise have gone for, so that's been really helpful.

Dr. Sarah Szanton ([15:33](#)):

And you've been so successful, so that's clearly working.

Dr. Deidra Crews ([15:35](#)):

You're kind. I would say that's one. And then one more, relevant to my research, I was advised early on that people should study something that really perplexes them. And even better if they study something that angers them. The advice I was given was that if it's something that you're really upset by, you'll never grow tired of working on it. Working in the area that I have been focusing on, which as I said I view as a matter of justice, I don't imagine I'll grow tired of it.

Dr. Sarah Szanton ([16:07](#)):

No, and there's unfortunately so much work to do.

Dr. Deidra Crews ([16:10](#)):

Absolutely.

Dr. Sarah Szanton ([16:10](#)):

Yeah. Well Deidra, before we go, is there anything you'd particularly like to promote?

Dr. Deidra Crews ([16:17](#)):

Always. So-

Dr. Sarah Szanton ([16:19](#)):

Your twitter feed?

Dr. Deidra Crews ([16:19](#)):

Oh yeah, you can always follow me on Twitter. Yeah, at the Center for Health Equity, we have a new and improved website, and so I really would invite anyone who's interested in the activities that we have ongoing at the center, which many of them are available online.

Dr. Sarah Szanton ([16:35](#)):

That's great. Thank you so much Deidra for sharing your work.

Dr. Deidra Crews ([16:39](#)):

Thank you.

Dr. Sarah Szanton ([16:39](#)):

It's been fabulous to talk to you about it. Check out our website for this podcast, nursing.jhu.edu/agingfastandslow, for the articles, resources, and websites referenced in this episode. And we invite you to add to the conversation by tweeting @agingcenter.

Dr. Deidra Crews ([17:01](#)):

In the next episode, we are talking to Stephen Johnston, about innovations to help us reimagine aging. If you enjoyed this podcast, please share it with a friend, rate it, or write us a review.

Dr. Sarah Szanton ([17:15](#)):

To all researchers listening, are you developing a behavioral intervention? Trying to figure out how to advance it through the research pipeline to get it funded and written about? Join the Johns Hopkins School of Nursing Center for Innovative Care and Aging on June 8th for a day of learning best practices and workshopping ideas on how to fund, test, and develop behavioral interventions. We also have an online portion that you can do anytime, even in your pajamas at midnight. For more information, contact agingcenter@jhu.edu.

Dr. Deidra Crews ([17:46](#)):

Special thanks to Jennifer McCord for editing and sound design, Erika Hornstein for producing this series, Florentina Costache for technical expertise, Tim Carl for web design, and Sydnee Logan for marketing. See you next time on Aging Fast & Slow.