

## **Transcript for Broadening Understandings of Vaccine Hesitancy**

**Quiara Shade:** Hello everyone and thank you for joining us today. My name is Quiara Shade

**Evan Trice:** I go by the name of Evan Trice

**Ismael Gonzalez:** My name is Ismael Gonzalez

**Quiara Shade:** And we are current second year medical students at the UNC School of Medicine. This semester, our social and health systems course explored multiple topics using the COVID-19 pandemic as a case study - some of which included social determinants of health as well as health policy and health disparities. In today's episode we will have an enriching conversation on vaccine hesitancy that we hope you'll find enjoyable and informative. By the end of this podcast we hope to broaden our understanding of COVID-19 vaccine hesitancy from the perspective of minority healthcare professionals, address potential factors that promoted vaccine hesitancy among minority populations, and emphasize an ideal approach to combat hesitancy among the same minority populations.

**Evan Trice:** We have a special guest to speak with us about her experience with tackling vaccine hesitancy in her personal life and patient population. Dr. Deidra Crews is a board certified nephrologist and professor of medicine at Johns Hopkins School of Medicine. She holds several appointments such as in the Departments of School of Nursing, the Welch Center for Prevention, Epidemiology and Clinical research, and the Center on Aging and Health. She is also the deputy director of the Center for Health Equity at Johns Hopkins School of Medicine and focuses her research on the drivers affecting kidney disease and hypertension outcomes.

**Ismael Gonzalez:** Dr. Crews, thank you for giving us the opportunity to speak with you today. I want to begin our episode by setting the stage for you as well as for some of our listeners. There was a lot of uncertainty about the status of our healthcare system in the height of the pandemic. Hospitalization and mortality rates were high. Additionally we were in a state of social isolation which prevented many of us from seeing our loved ones. Finally in December of 2020, the authorization of the Pfizer biotech vaccine was approved for emergency purposes. We wanted to begin our conversation by asking what were some of your initial thoughts with this approval?

**Dr. Crews:** So when I first heard the news that the vaccines were rolling out I was very excited - you know both personally for my own protection against COVID given that I am a practicing nephrologist. And nephrologists were among the most kind of engaged clinicians around during the time of the pandemic, probably next to our colleagues in critical care and infectious diseases, we were probably the third most consulted discipline during that time. So I was excited personally. I was also very excited for my patient population as you might know kidney disease is one of the risk factors for severe COVID infection and mortality from COVID and so I was particularly excited about my patient population having the opportunity to get the vaccines. While I was excited, I was also concerned that there would be people who would have

some hesitancy about getting the vaccine - in part because, you know thinking about my patient population in particular, I knew that in addition to just having questions about the vaccine that they might actually have some challenges for actually getting it. So even before the concerns that I think a lot of people started to talk about and certainly write about in the literature of there being some hesitancy about receiving the vaccine, there were issues around just the distribution and the availability of the vaccine particularly in some socially marginalized communities. And so honestly that was my first concern especially because I started to hear about there being few places for people to actually access the vaccine and I knew that, you know people like me and many of my colleagues in academia, yes we could drive 30, 50, even 100 miles. I heard of some people driving to go get a vaccine at the nearest place that had an available appointment. I knew my patients largely were not going to be able to do that particularly my the dialysis patients that I care for who often have mobility challenges among other challenges that might impede them being able to get the vaccine. And so I was concerned first about access and then as some of those barriers started to be addressed including initiatives around actually providing the vaccines in some clinical settings where people could get them either at the local health department or even in the case for for people treated with dialysis at their dialysis facility - which was a great although I think a little late to come advance that came along in the pandemic. So once that rolled out then I think some of the issues around whether people felt they could trust the vaccine both to be safe as well as effective then that sort of emerged. And you know I and others tried to do my part to try to at least communicate information about the vaccines to kind of help. I'm a big believer that if people just have the information they can make their own decision about what's best for them and so I tried to be engaged in that.

**Ismael Gonzalez:** What factors played a role in you getting a vaccine?

**Dr. Crews:** Oh well so I will admit I was pretty fearful. I was on clinical service just a couple of weeks after sort of the big announcement about COVID, so you know we were fortunate we did have access to personal protective equipment here at Johns Hopkins and we had a team of volunteers that was sort of you know making face shields and things for us, and we had a sufficient supply of masks as well. I was still fearful about getting the COVID infection myself and also about taking it home to my family. You know, I had a complex routine of you know changing clothes and things so that I didn't even wear the same clothes, you know, clothes into my home. My husband all but sprayed me with Lysol when I would get home as well so that I didn't bring anything into our home. So I had personal personal worries about my own safety and then you know, as I said, I also had deep concerns about the primary patient population that I take care of, which is largely one who as an internist first and certainly as a nephrologist, I care for people who tend to have multiple chronic health conditions. And as we were learning about who was dying of severe COVID, you know that was my patient population and so I was concerned about that. Also had concerns about my broader family have a very large extended family and was quite concerned for them especially those that I knew had multiple health conditions so those are some of the personal concerns that I had

**Quiara Shade:** Earlier you referenced how your patient population may have experienced some mistrust in hesitancy regarding the vaccine, so this question expands on that point. The history of medicine and racism in the US has led to mistrust among certain minority populations and our class discussion proposed that this mistrust could have led to the initial vaccine hesitancy we saw in certain groups. For example in the 1800s, medical schools relied on enslaved black students for anatomical experiments and southern Bible schools recruited students by advertising its abundance of slaves. Fast forward to 1932 the 40 year Tuskegee Syphilis experiment began. 600 black men with Syphilis were left untreated by US public health services so they could study syphilis disease progression. And in 2016 a study conducted by Hoffman, et., all at UVA showed that 73% of medical students and residents held at least one false belief about biological differences between races. Did you or others in your personal sphere briefly consider this historical past when making a decision about the vaccine?

**Dr. Crews:** Well yeah, well thank you for that question. So you know whenever I hear people speak about this mistrust or distrust in healthcare you know I think a lot of references made to things that happened long before most people who are sort of dealing with this today were even born. And so that's not what they are mentally referring to when making these decisions. What they're more readily referring to are experiences they themselves have had in terms of being in the healthcare setting and not feeling like they were heard or seen or respected or experiences that their family members or friends have had that they have shared with them. And it's not just the experiences in the healthcare setting that lead people to not feel that they can trust or feel that the trust has been earned by the healthcare system. It's experiences with other systems as well. So we think about our justice system as an example, our social services sort of systems as well that, because that sort of social contract that many people feel has been broken for them. Like these protections that should exist for all people in our country if people feel like that has been broken in any setting then when coming into the system and coming into the healthcare system then they may be weary and fearful. I actually think that the distrust or mistrust is actually rooted in fear. It's a deeper feeling than just sort of trust, it's actually fear of being mistreated and actually having harm come to them. And so I think that's the route. So it's not you know - while I, you know definitely acknowledge the harm of the you know, the Tuskegee study of untreated syphilis for sure I think it's much more harmful what's happening right now you know. And I think that's actually really what's driving what we see when people are - they have to take a pause and sort of think about is this something that I can trust given all of these other these other aspects of society that hasn't really proven itself trustworthy - for me or my family or my community and so I think that's that's really what we're dealing with is much more present day issues.

**Evan Trice:** While we are on the topic of information and misinformation, a 2021 Kaiser Family Foundation article on media and misinformation found that of 1500 U.S. citizens surveyed, 60% of people surveyed believe or are unsure as to whether the government is exaggerating the number of COVID-19 deaths, 24% believe are unsure as to whether the COVID-19 vaccine contains a microchip, 21% believe are unsure as to whether or not the COVID-19 vaccine can change your DNA. Can you speak on the politicization of the pandemic and how you saw this influence both your professional and family realm?

**Dr. Crews:** Yeah well thanks for that question. so I'll start with my family. So I'm the only physician in my family and I have a very large family. My father's side of the family, we sort of calculated a few years ago, he has 90 first and second cousins. So enormous family - great cookouts - but enormous family. So really big family. So I for sure had a number of relatives that reached out to me and said hey, you know, 'what do you think about this vaccine?' And I would try again, it would go back to what I mentioned a moment ago - which is that I would for sure try to give people information. Not sort of just say hey you should take it, you know, but I would try to give him information. So some of the things that came up were you know can we really trust this vaccine given that it was developed so quickly right. That was one thing that people had some concerns about and I actually would try actually try to provide people with information. It may have appeared that it was but the technology underlying it the messenger RNA technology actually it's been around for decades and it's because of that technology having been around for that long and sort of you know tested and some of the nuances of it already sort of worked out, that we were able to as a sort of scientific community to actually prepare the vaccine for this novel this new virus so quickly so to speak right. So that's something that I would try to let my family members know. That using - to the extent that I could - you know lay language to help them to hopefully better understand that it wasn't like a thing where 'hey we got this virus and let's just go in a lab and two hours later we've gotta we've got this vaccine.' It wasn't that at all and so that was one of the things that I tried to talk with him about. And then also, I think I was in a unique position as a physician scientist to be able to talk with my family members about how the clinical trials actually testing the efficacy of the vaccines had rolled out and sort of what's involved in those. And so I would try to share that with them and then honestly finally the best kind of you know witness to the safety of the vaccine that I could I could provide was my own personal experience with it. So I was pretty open about you know posting to social media for example and texting you know family members and things about how I myself had gotten the vaccine and how I felt afterwards and you know and that's something that I think hopefully gave some comfort to some family members. And I did have some that still did not feel comfortable getting the vaccine. They waited for quite a while before getting it. We unfortunately lost a few family members to COVID but that is something that you know I definitely tried to use use my experience and to be able to try to spread that message and I took a similar approach with a couple avenues one through our work through the Center for Health Equity at Johns Hopkins where we have a very engaged Community Advisory Board who are in many cases leaders in the broader community especially here in Baltimore and here more broadly in Maryland. So we use those relationships actually to arm our community partners with good information that they could share with their various organizations that they have so that they could spread the word. We also, on our center website, setup information about the vaccines that people could sort of easily access to again share with their community partners. I gave talks to groups like the American Association of Kidney Patients, as well trying to provide the information about the vaccines and in particular what was known about its efficacy for people who have chronic health conditions or people who are immunosuppressed as is the case for many people living with kidney disease. And so those are some of the ways I also had some opportunities, I'm sure afforded by my being an

academic, and particularly with a focus on health equity to speak to some regional audiences as well as national audiences about about the vaccine rollout particularly particularly for some socially marginalized and minoritized communities to again hopefully spread the word about their safety. So that's some of what I did. It definitely required a lot of effort from me and lots of other people to try to get the word out about the vaccines. I think when we look at some other countries around the world that have had greater uptake of of the vaccine what we see is that healthcare in general is less politicized than it is in our country such that there's a level of trust and understanding of the roles of government in sort of distributing health information and sort of health promoting services such that when at the government level when they said 'hey everybody needs a vaccine,' people just got in line and got the vaccine right and that is not the case in our country and it is a real shame. I think in terms of you know what can be done around that as far as the misinformation. I think that not only in our efforts to sort of give people you know facts give to share to share truth with our patients that we may be taking care of but also the broader community. I think also giving people some information about what are trusted sources so that they can assess on their own who can be trusted or which information can be trusted. I think is really valuable so helping people to understand you know what does it mean to be - what is a clinical trial you know and what goes on, who funds those, and what's the rigor that sort of undergirds clinical trials that are supported especially by federal agencies like the National Institutes of Health. Sort of giving people that information so that then yes when they are online where you can find all sorts of things all sorts of things that aren't true that they will be equipped with understanding how to sort of decipher what are what are things that might be true and that they should that they should follow and trust and things that maybe they should have a really healthy level of skepticism for.

**Ismael Gonzalez:** As we round off the episode I wanted to ask about the most effective strategies that you have seen between your work and that of the Center for Health Equity. What do you think helps relieve some of the hesitancy that persists?

**Dr. Crews:** Yeah so you know I would say that the approach of giving people information and allowing them from that to make their own decision. So not assuming that people just want to be told what to do right and but rather taking it from the approach of if you give people facts they will arise to what is the best decision and often that would have been the recommended decision on their own if you just provide them with the truth you know. And sort of in good information is packaged in a way that's easily understandable. I think that's been really key and then sort of repeated efforts around that. Hearing those facts come from people who are in multiple different sectors and people that they feel that they can trust and so some of what we're recognizing that yes there are family members of mine that may trust me, there are certainly patients of mine that may have a level of trust, but probably where I had the greatest opportunity was to arm community partners with the information and then have them deliver that information to their communities that they have long standing trusting relationships with. So that was really probably the best approach, but we had to get you know just truth. It was a campaign of truth telling that I think led to the the sort of distribution of of the vaccine

**Ismael Gonzalez:** Thank you again doctor Crews for taking the time to speak with us. We really appreciate it. For our fellow listeners if you would like to hear more from doctor Crews you can find her in the aging fast and slow podcast on Spotify.

**Ismael Gonzalez:** My name is Ismael Gonzalez

**Quiara Shade:** My name is Quiara Shade

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**Ismael Gonzalez:** Thank you for listening.