Episode 145

Why do religious people achieve better nutrition & physical activity goals, & have better cardiovascular outcomes? Clarence Jones, Dr. LaPrincess Brewer & Dr. Mary O'Connor unravel a new study.

Research findings from Mayo Clinic & published in the Journal of the American Heart Association at the end of 2022 found that "participating in religious activities, from church services to private prayer, as well as holding deep spiritual beliefs, are linked to better cardiovascular health among Black Americans." According to Dr Brewer of the Mayo Clinic, multiple socially determined challenges which were magnified by COVID-19 are preventing African Americans from living their best lives by following a healthy lifestyle to prevent heart disease.

The recent study focused on better understanding some of the psychosocial influences on health behavior change among African Americans, and in particular following those activities as defined by The American Heart Association's "Life's Essential 8TM." These include eating well, being active, quitting tobacco, healthy sleep, weight management, controlling cholesterol, managing blood sugar, & managing blood pressure.

The study found that increased church attendance and spirituality was associated with higher levels of physical activity and less smoking, suggesting that having social support and an optimistic outlook may also encourage individuals to practice healthy behaviors.
Today's discussion features Robert "Clarence" Jones, M. Ed., CPH, CHW, CPE, Executive Director at the Hue-MAN Partnership and a Community Engagement Strategist, along with Mayo Clinic cardiologist and study lead author Dr. LaPrincess Brewer, MD, MPH, whose primary research focus is in developing strategies to reduce and ultimately eliminate cardiovascular disease health disparities in racial and ethnic minority populations and in underserved communities. Dr. Brewer is also an Assistant Professor of Medicine at Mayo Clinic.

This episode is hosted by Dr. Mary O'Connor, Chair of Movement is Life and Co-Founder of Vori Health.

Dr. O'Connor: You are listening to the Health Disparities Podcast, a program of Movement Is Life. Movement Is Life is a philanthropic, multidisciplinary coalition founded in 2010. We seek to decrease musculoskeletal health disparities among women, racial and ethnic minorities, and people living in rural communities. As a nonprofit organization, we focus on raising awareness of the impact of disparities on chronic disease management and quality of life through programs that focus on early intervention, education, behavior change, and advocacy. I'm Dr. Mary O'Connor, chair of Movement Is Life and your host for today. I'm also the co-founder and chief medical officer of Vori Health and Professor Emerita of Orthopedics at Mayo Clinic and past professor of Orthopedics and Rehabilitation at Yale School of Medicine.

Research findings published in the Journal of the American Heart Association towards the end of 2022, found that, "Participating in religious activities from

church services to private prayer, as well as holding deep spiritual beliefs are linked to better cardiovascular health among Black Americans." The researchers go on to suggest that recognition by health professionals and researchers of the centrality and influence of religiosity and spirituality in the lives of African American adults may serve as a means to address cardiovascular health disparities through sociocultural understanding and the strategic development of culturally relevant lifestyle interventions, unquote. We will put a link to the paper in the program summary. So, we know that musculoskeletal health disparities go hand in hand with cardiovascular health disparities. So, I am so excited to have with us today to discuss these research findings and some of their implications, Mr. Robert "Clarence" Jones and Dr. LaPrincess Brewer. Mr. Clarence Jones, M.Ed., CPH, CHW, CPE is a community engagement specialist and former director of community engagement at a federally qualified health center in Minneapolis. He served as a member of the Clinical and Translational Science Institute Executive Leadership team and the Public Health Disparities Research Board at the University of Minnesota. Mr. Jones has extensive experience in collaborating with community and faith-based partners in promoting community wellness and access to health services. Welcome Mr. Jones.

Clarence Jones: Dr. O'Connor, thank you for the invitation to be a part of this show today.

Dr. O'Connor: Thank you. Our second guest is Dr. LaPrincess Brewer, who also has a Master's in public health, and she is an assistant professor of medicine in the division of Preventive Cardiology, department of Cardiovascular Medicine at Mayo Clinic in Rochester, Minnesota. Dr. Brewer's primary research focus is reducing cardiovascular disease health disparities in racial and ethnic minority populations and in underserved communities. She has a special interest in increasing minority and women's participation in cardiovascular clinical trials through mobile health interventions. Welcome Dr. Brewer.

Dr. LaPrincess Brewer: Thank you so much for having me today.

Dr. O'Connor: Okay. So, we have two incredible experts to talk about this exciting study. Dr. Brewer, I'm going to start with you. We know that African American adults have a higher prevalence of cardiovascular risk factors. This leads to higher cardiovascular disease mortality than white adults. So basically, it's more likely for an African American to die of heart disease than a white American. The years of life lost are really pretty staggering and a major factor in the life expectancy disparities that we see between African American and white populations, and also between low income and high-income populations. And it's a pattern that's repeated right across the nation. So, Dr. Brewer, please share with us what you're seeking to understand with your disparities research.

Dr. LaPrincess Brewer: Sure. Yes. So, my research seeks to better understand the root causes of cardiovascular health disparities. And as you can imagine, these are very complex but are significantly influenced by what are called the social determinants or drivers of health and these are environments in which people are born, live, work, play, and worship, which is relevant to our study that affect health outcomes. And they can either be negative or positive influences on heart health. Unfortunately, African Americans are faced with an overwhelmingly high burden of negative social determinants of health, including chronic stress. And

these can be related to factors such as food insecurity, systemic racism, the wealth gap, and socioeconomically disenfranchised communities. And many of these issues have been amplified or magnified even during the COVID-19 pandemic. And these challenges prevent African Americans from living their best lives by following a healthy lifestyle to prevent heart disease in the first place and they hinder their ability to control their heart disease risk factors. So, my research, and, you know, this particular study, you know, focuses on better understanding psychosocial influences on health behavior change among African Americans. These include factors like diet and physical activity, self-regulation, how you're able to do this on your own and your confidence to do so, as well as social support. And social support comes from in our study, you know, the faith community or the black church. And we integrate these into community-based behavioral interventions that, as you mentioned earlier, are culturally tailored for African Americans to assist them in better adopting and actually maintaining, you know, healthy lifestyles. So, I'm the founding director and principal investigator of the Faith Cardiovascular Health and Wellness Program. And every great cardiologist or clinical investigator has to have an acronym, right? So, faith stands for Fostering African American Improvement in Total Health. And more recently we've studied in this particular article, the role of religiosity and spirituality in cardiovascular health. And we found that those reporting higher religiosity and spirituality were more likely to reach recommended guidelines for physical activity, diet, smoking, and blood pressure. And our findings truly highlight the importance and value of faith-based interventions, including churches for prevention and control of heart disease.

Dr. O'Connor: Wow. First of all, that's so important, such an important finding that I think people may have linked or intuited, but that doesn't, as we know, that doesn't cut it in medicine, right? You need peer reviewed research to say, okay, we think this is important, this link between patients having the social support that is spiritual in nature, that is somehow linked to spirituality and their overall health and wellness, and the behaviors that they adopt or shed, right, that there is a clear link. Mr. Jones, I would love you to comment on this.

Clarence Jones: I think it has been a, a wonderful, wonderful experience of working with Dr. Brewer. Let me tell you a little bit about myself and kind of weave this together. I am called the Community Health Strategist for the Hue-MAN Partnership. And so, my job is to find the treasures in our community that can help us to be able to address the issues around health. And so, I spend a lot of my time talking to people, probing people. I'm a prober asking a lot of questions but our whole goal is to strengthen community health through innovative partnerships. It is so important for us to find the right, I want to use this term spearhead in a very positive manner to really find the right people to lead the charge because in so many times in our communities, there has been such a matter of distrust with the health profession, and we're trying to figure out what are the ways in which we might be able to positively engage the community with innovation, but also strengthen them through, you know, transparency through honesty, and then giving them the appropriate information for them to make an informed decision. And so, part of our work is to find those treasures, those organizations that may not be getting the press or may not be getting the notoriety that other people get. And so, we have the opportunity to work with HMOs. We have worked with federally qualified health centers and neighborhood

organizations. We work with the academic community with a lot of universities, work with researchers. We work with nonprofits, and we also work with you know, just individuals who have self-identified. And that's another important thing for me in terms of this work is who have self-identified that they want to work with us. I always tell this story. I hope it's okay, Dr. Brewer, when I tell this particular story because of the way I said this a little bit earlier, we are looking for the treasures in the community. When I met Dr. Brewer, when I was introduced to Dr. Brewer, it took us 18 months to vet her.

Dr. O'Connor: Wow. Dr. Brewer, I didn't know you had such a complicated past!

Dr. LaPrincess Brewer: The interrogation room!

Clarence Jones: Well, she was from Mayo, you know, and so, you know, so, you have that history, and you have that perception, you have those myths, those kinds of things. And so, she was coming to our community and what we wanted to do was say, well, we like what you're saying, but we have to figure it out and to learn and to know you before we are able to, you know, to present you to our community. You know that, for a lot of people might be a lot, but for us, it was important because we had communities that had been struggling for such a long period of time, and we really wanted to find the treasures. And so, Dr. Brewer has really become a treasure for us in terms of this work because she's authentic. And we wanted to make sure that we were promoting the people that were really going to make a difference and going to move the needle for us in terms of health.

Dr. LaPrincess Brewer: Oh, thank you so much for those kind of words, Clarence. But yes, I feel as if I learned more from the community and the faith community, you know, than I've probably given back to them. But yes, I really appreciate all that, you know, I've learned, and everything happens for a reason. So, you know, having that time for trust and relationship building has actually brought us to where we are today, right. Doing a podcast with you today discussing research that is going to be shared with a broader audience. So, you know, we don't take this lightly, so we really appreciate you having us.

Dr. O'Connor: I'd like to explore a little bit more, Dr. Brewer, some of those learnings, like you just commented, you learned more from the community than you got, more than what you think you gave. So, what are some of those gifts that you received?

Dr. LaPrincess Brewer: Yes, so I've learned from the community throughout this process that sometimes you have to release your own agenda and let the community guide the agenda. That's something that, you know, we as health professionals and researchers and leaders of research have the hard, difficult, you know, time with, because we're used to, you know, setting, you know, what the research question is and, you know, how are we going to disseminate this back, you know, to the community, you know, on our own terms. But I had to really show my own cultural humility, if you will, and listen to the community. That's the biggest lesson that I've learned, is that you have to listen. And when you listen to the community, you'll see how much wealth of information that the community has that can enrich your own research program. And I'm sure we'll get into it, but, you know, my research initially started as, you know, in-person seminars going out into the community, but the community said, hey, we got to, you need to move

with the times, Dr. Brewer. Let's move digital, you know, with mobile health and digital health. And, you know, if I wouldn't have listened, you know, I wouldn't have been able to innovate and transform my research into what it is today. So, I would say those are some of the things that I gathered. You really have to, one, release your own agenda and, you know, really listen to the community and what they identify as priorities versus what you may identify. You may meet in the middle, but I think it does take some time to listen for that trust and relationship building.

Clarence Jones: When Dr. Brewer came to us and she was talking about what she wanted to do one of the things I told her was, this isn't Baltimore. And what I meant by that was that we are talking about, there are things that you learned, this is, there are different things and different factors here that you may have learned there that may not be as effective here. And she heard us. But there are things that when you come into a new space, you have to be willing and open in order to be able to be more effective. You know? And if you're not willing to do that, then you're going to miss the type of growth, though, the type of experiences or the type of learning that you can do. So that's another part of our story.

Dr. LaPrincess Brewer: And what Clarence is referring to is, I did my training, clinical training at Johns Hopkins in Baltimore, Maryland and that is where my faith program was actually founded. So, when I moved to Minnesota, I wanted to translate that here to Minnesota. But as Clarence mentioned, he said, oh, well, you know, this isn't Baltimore, this is Rochester and Minneapolis, St. Paul, you know, Minnesota. So, you need to, you know, check your audience.

Dr. O'Connor: But I think that what you, what you're speaking about, is basically a fundamental issue that we have throughout medicine. For example, in my company, Vori Health, you know, we have really focused on identifying what matters to patients, not just what is the matter with them, what matters to you, right? If you have knee pain, why does that matter? Because you actually want to run a 5k, so, or you want to be able to play with your grandchildren if you have back pain, right? So, we're focused on how do we help you achieve that goal that matters to you. Okay, we need to address your knee pain or your back pain but again, it's flipping the script to say it's what matters to you, what matters to your community, to this community, right could be far different than what matters to another community. And then staying focused on that to help address that. So, it really is a different mindset in medicine, right, where we're so used to a kind of doctor driven, paternalistic approach. And it's not that, you know, it's not that the physicians don't have the, they do, they have the knowledge, right but it needs to be team, it needs to be a team-based approach.

Dr. LaPrincess Brewer: Yes.

Dr. O'Connor: And the goal has to be the goal that's focused on the needs of the community.

Clarence Jones: Dr. O'Connor, I'd like to say this real quick. I think that you're absolutely correct. And one of the other things that was important with the work that we've done is that we look at the assets of the community.

Dr. O'Connor: Oh, yes.

Clarence Jones: We don't come in there with the whole idea about deficits. Oh, there's something so wrong with you. Like you just said, you know, what are you looking for? What's going well and how do we improve that, how do we enhance that? And if you can do that, I mean, Dr. Brewer has been extremely good at that, listening to what we're saying, because people are already beaten down. I mean, you know, people are already having issues, and we're trying to move them to a different level as it relates to health disparities in our various communities, and the only way that you can do that is by making sure that people understand that they're valued.

Dr. O'Connor: I think this linkage that you found, which to me is so intuitive, but nonetheless, right, that spirituality impacts health like, that's like a duh for me personally, but obviously not necessarily for everyone. So, Dr. Brewer, the research has focused on the American Heart Association, essential eight healthy behaviors as basically key measurable parameters because you know, in medicine we have to measure things. Right. So, can you tell us a little bit more about these Essential Eight indicators and why you found them to be a good fit for your research?

Dr. LaPrincess Brewer: So, the Life's Essential Eight are an update from the prior version of the American Heart Association's Life's Simple Seven. And they are vital measures for improving and maintaining cardiovascular heart health. And they include stopping smoking or vaping, eating better, healthy eating maintaining an act of lifestyle, losing weight or maintaining a healthy weight, managing your blood pressure, controlling your cholesterol, and reducing or controlling your blood sugar. And the final one, that was the addition to the Life's Simple Seven to Life's Essential Eight, was adding sleep, which I love, which we all love, right? And these are, you know, all things that we can do to reduce our risk for heart disease and to live longer, stronger, and healthier lives. And the reason why we integrated this into our research is because it really encompasses lifestyle change. So, it has both, you know, health behaviors and, you know, clinical and biological, you know, factors but each person, you know, is doing better or worse than each of these. We all have our things that we can work on, you know, and our community really liked having this entree, if you will, of things that they could work on to improve their overall cardiovascular health versus just telling them what to focus on. So, it gave them more autonomy and control, you know, over healthy lifestyle change. And we've used this in several of our studies as our primary or the main outcome which has shown improvements in overall heart health. With that update, you know, from the Life's Simple Seven to the Life's Essential Eight, I was honored to serve on the writing group with the American Heart Association President, Dr. Donald Lloyd Jones as past president and cardiovascular epidemiologists and cardiologists along with other national leaders. And, you know, we really put our heads together in putting together the Life's Essential Eight and updating it so that it's more user-friendly, and that it also has a focus on psychological health and wellbeing. And I was honored to write that section, you know, within the paper on psychological health and wellbeing and cultural tailoring of the Life's Essential Eight to meet the needs of patients and the population. So, it fits right in and aligns well, you know, with what we're doing with this religiosity and spirituality paper, as well as our faith program.

Dr. O'Connor: Mr. Jones, how helpful do you think this Essential Eight concept is to a community? So, where they can actually kind of see in, you know, very discrete, you know, bundles, areas where they could focus their behavior to improve their health?

Clarence Jones: You know, that's quite interesting. We had actually did a a survey using My Strength by Health, which is something from the University of Minnesota that we've been using. But what we found out during that particular survey, we found out that there were two things that the community was really struggling with, and it was relationships and sleep. Sleep was so…, it came, it was one of the, it came to the top that this is one of the reasons why people were struggling. We were taking, you know taking drugs while we're, during this period of time because, you know, if you can't sleep, what do you do? If you're in a relationship, you're in a house with, you know, 10 people and you've got a one-bedroom house, what do you do? You know, you have got to find a way to do it. So, I think that whole issue around sleep, and I was so excited when the American Heart Association had that, because it just confirmed, I mean, even before we knew that, before we saw the report, it confirmed how important sleep was. And for us as a people to be able to address.

Dr. O'Connor: Oh, it's so important. And it is one of my personal behavior improvement goals. Right?

Clarence Jones: I get it. I get it.

Dr. LaPrincess Brewer: Mine too. I work on it every day.

Dr. O'Connor: More sleep, better quality, sleep.

Clarence Jones: Exactly.

Dr. O'Connor: I mean, it's so important and we all know it makes a big difference, right?

Clarence Jones: Right.

Dr. O'Connor: You get a nice sleep, everything is better.

Clarence Jones: Right.

Dr. O'Connor: And, of course, that is what I tell my children, you know.

Clarence Jones: Yes, yes, exactly.

Dr. O'Connor: Go to bed. It'll be better in the morning. Right?

Clarence Jones: Yes, yes, yes.

Dr. O'Connor: All right, Dr. Brewer, I'm going to, this might be a provocative question. Why does the Essential Eight, why is the Essential Eight not an essential Nine and spirituality be included as a ninth item?

Dr. LaPrincess Brewer: Yes, so interestingly, we said we could have Life's Essential 20 plus because once we all got together in this group to write this, we all had our own, you know, we want you to add this, we want you to add that. And of course, I was the psychosocial influence person, hey, we have to have stress, we have to have spirituality, religiosity. But it was really difficult to find a way to measure that appropriately because it's influenced by so many different aspects, as I mentioned, kind of at the beginning with the social determinants of health. And there's no clear measure across the entire population to measure, you know, all of this. So, in the end we said, why don't we just say this is ripe for future research and maybe the next iteration of the cardiovascular health measure will have some of these measures because there just wasn't enough data to support. So, this study actually would provide more data to support that in the next, you know, iteration. But that's the reason, we all had our own things, and it was just really hard to hone in on one. But we all agreed that sleep, you know, was probably the next best measure.

Dr. O'Connor: So, Mr. Jones, if the Essential Eight was an Essential Nine and spirituality was included, how do you think that would resonate in your community?

Clarence Jones: Well, I think spirituality is one of the things that people, whether they talk about it or not, try to exhibit. You know, some people are more overt about it, right? And some people are much more quiet about it, but even in the conversation, they'll give mention to God, or they'll mention or give mention to a higher power, or they'll say something of that nature. So, I think it is very much a part of our community as a, you know, as a conversation or as a belief system. The other thing too is I think that there are so many different ways in which people approach this, you know, to get back to Dr. Brewer's point, there's so many ways that different people approach this, that it really becomes a very personal position and you have to allow people the opportunity to be able to express themselves in an appropriate manner because there will be, definitely, there will be some differences of opinions about how you do that but there are also some very core values that I think that people have as it relates to spirituality or what they think spirituality is. So, it is to be discussed later.

Dr. O'Connor: I feel like my next question I want to ask you both could be from like 200 years ago, right? The separation of church and state, as the founding fathers wrote the documents for this country, because it's kind of a question about can, how much of a difference community makes with or without spirituality? Okay. And the reason why I ask this is because Movement Is Life, we have a program called Operation Change, which does not have a defined religious component. And in Operation Change we bring 40 to 50 women together, adult women who have knee pain and typically other comorbidities, and for the audience, that means like diabetes, hypertension, overweight obesity. So and they are from underserved communities. So, we can have a group that's African American women, a group of Hispanic Latina women, a group of rural white women, for example. And we do that so that we can align the education within the program to be more culturally relevant, right? If we're going to talk about how to cook healthier meals, those recipes can be those that are more culturally aligned with the kinds of food that they normally eat. And, this program runs 18 weeks, it's three hours a week. So, an hour of education, an hour of some kind of movement, and the third hour for small group motivational interviewing. And we've done numerous programs with

really, honestly impressive results. 18% improvement in walking speed over the span of the program. And this is a remarkable decrease in their sense of hopelessness, because so many of these women are depressed and all this without drugs, doctor visits, antidepressant medications. And when we surveyed our participants and said, what did you like best about the program? I honestly thought this was my bias coming into that, that it would be the small group motivational interviewing sessions because that's really fundamentally what was different that we added. But what we learned, again, going back to the beginning of our conversation where it's listen to your community, right? What we learned is that the difference was that we created a community for them, and that they gained the emotional support that they needed from each other to make the behavioral health change. So, it's the fact that we created this community that made the difference. So, my question to you is, do you think that there's a big difference between creating a community or creating a community that also has, you know a spiritual, you know, background or is linked to spirituality in terms of improving health outcomes?

Clarence Jones: I think it's literally impossible to bring people together in a group and have some kind of continuity without spirituality being brought up. And I, again, I talked about that whole idea about it being overt but somebody's going to say, I thank God for something, you know, and, other people think, yes, yes, yes. You know what I mean? So, to me community, it's almost inseparable. It's going to happen eventually. That's my experience. That's what I think, what I believe that it's literally impossible to bring a group of people together, even if they're having a good time, where somebody's not going to talk, bring up spirituality, some kind of way that spirituality is going to pop up.

Dr. O'Connor: Let me just comment on that and then Dr. Brewer, I'd like you to comment.

Dr. LaPrincess Brewer: Sure.

Dr. O'Connor: We didn't actually ask them about spirituality and whether they felt they brought that into the community. So that's an excellent point, because having visited some of our programs, I can attest from my personal observation that a lot of these women are very spiritual and honestly, I mean, when you are, when you're in a community where, you know, you have lots of things stacked against you and lots of challenges, and you cannot control these social determinants, you know, people gain their strength from, you know, from God, from divine mother, from whatever their spiritual, you know, linkage is. So that's just my personal comment. Dr. Brewer?

Dr. LaPrincess Brewer: Yes. I love this question. But yes, I believe that actually both matter you know, for patients and community and context is most important and I believe that the common denominator really for both of our programs is as you're alluding to the supportive and communal in environment of both, that, as you said, created this community and relevant to our work, you know, that community is the faith or a community or the black church and, you know, we've just harnessed, you know, that established community for health promotion. And it's really a form of, you know, cultural humility and understanding and meeting people where they are right in the community. And as Clarence said, it just naturally, you know, comes together whether you, you know, identify with a

particular religious practice or have your own spirituality, you know, you bring that to the community.

Dr. O'Connor: Well, I think this is just fascinating. And one area that I want to follow up with you both on after this podcast is ideas on how your research could help groups, like Movement Is Life, right, incorporate some of your findings into our community-based programs so that perhaps our Operation Change program could be even more effective than it is now.

Dr. LaPrincess Brewer: I'd love to.

Dr. O'Connor: So, how have other groups been, for example, the American Heart Association in being receptive to your research findings to basically incorporate the concept of spirituality into programs? Dr. Brewer, I'll start with you.

Dr. LaPrincess Brewer: Yes, I'm really pleased that the American Heart Association has, you know, expanded its focus and is now, you know really placing a priority and lens on social aspects and influences of health. And they also have a longstanding, you know, relationship with faith-based organizations for health promotion. But I believe now there's a focus of how do we integrate this actually into the programs. And they're recognizing that, you know, faith-based organizations are, you know, trusted institutions within underserved communities, and that people not only seek, you know, spiritual refuge and salvation, you know, in these places of worship, but they are also wonderful, trusted vessels to distribute reliable health information, right? So, this is how the American Heart Association and other professional, you know, societies have partnered with these organizations including, you know, health professionals such as, you know, us and you know, researchers and also broader health systems have also partnered with churches. So, you know, I'm really pleased to see that we're now moving towards integrating, you know, this key influence on health into programming.

Dr. O'Connor: That's fantastic. Mr. Jones, any comment on that?

Clarence Jones: Well, the human partnership, we are definitely a public health focus organization. And so, spirituality in terms of public health is also one of those things that emerges for us. And so, we are in that space where we listen to what the community is saying, it becomes bidirectional, and then we find partnerships to make those things work. One of the reasons why we've been excited about Dr. Brewer's process is because it is, it's still public health. It still speaks very clearly to the needs of the community. And we are excited about being able to, to confidently recommend faith to other organizations that we come in contact with. So, it's that public health lens that we look at, which also is inclusive of the spirituality and then, we find ways in which we can, I don't want to say organically, but we just find ways in which we authentically engage people in the conversation.

Dr. O'Connor: That's fantastic. You're currently developing and testing the feasibility and acceptability of a culturally appropriate risk-based, digital application intervention, meaning virtual, right. So, on a mobile device targeting several cardiovascular risk factors among African Americans, and this is a collaboration between both of

you. So, could you tell us a little bit more about this exciting project that you're working on?

Dr. LaPrincess Brewer: Yes, so as I mentioned earlier, it's about listening to the community. So this idea actually was born from the community, you know, and that they said, hey, let's move with the time so that we can increase our reach and access to the broader community and have it in a form that we can reinforce many of the concepts that you're trying to teach us about healthy lifestyle. So, they suggested moving FAITH from, you know, an in-person face-to-face intervention to a digital or mobile health intervention through use of a smartphone-based app. And I said, okay, if you want it, you're going to help me design it. So, we worked together in co-creating and co-designing this in health intervention with African American community members to better understand their needs and preferences and the features. So, they gave us, you know, every input on everything from font size, color, to the actual images and visuals on the app and I think that that made it a much better enhanced and culturally tailored intervention that people were eager to use. It was community vetted, if you will. And so, again, it wasn't my own idea, but it was born out of the community. And this was actually before the pandemic hit too, so it was kind of like right on time, you know, once we were ready to do this clinical trial. And I also wanted to mention that, you know, Clarence and I are partners in this, and we applied for significant funding through the National Institutes of Health and the American Heart Association to fund this clinical trial. And we wrote this together. I received feedback, you know, with Clarence as well as our, we have a community steering committee, which is made up of diverse individuals and organizations, you know, from the Twin Cities area and Rochester, Minnesota, where, you know, the flagship Mayo is. So, again our patients engage with the app on their own time but still kind of in the communal environment of, you know, knowing that my church is a part of this, I believe, you know, made people more engaged and want to see it through, if you will. And our results were overall positive. We actually just published them in one of our top cardiology journals, *Circulation*. And it showed that our participants had overall improvement in their heart health scores according, as we mentioned, you know, the Life's Simple Seven from the American Heart Association, which will be updated to the Life's Essential Eight. And we also had improvements in health behaviors that are extremely difficult to change, so diet and physical activity. So, we're very proud to see that our app resulted in these significant changes and could ultimately prevent heart disease among, you know, our participants.

And our app is also now being tested in a community health center. So, Clarence has many connections with, you know, federally qualified health centers. So, we're now transitioning that to this health center to improve hypertension control in African Americans. And I think you'll be interested in this, when we asked the patients at this clinic, we didn't come in with the agenda of talking about religiosity and spirituality, but when we asked them to give us feedback, you know, on the app, we're basically transitioning the FAITH app with churches to the clinic. And we said, what are your thoughts on the religious aspects that we have integrated into this app? Should we remove this since we're now going from the community to the clinic? And the participant said, absolutely not. They felt that the religiosity and spirituality components were a part of black culture, and whether they were religious or not, they just felt that it represented their

community and many of them mentioned that they weren't religious at all. So yes. So, it really brought home the point of, you know, why we're doing this. So, we're now working to optimize the app to allow for broader access to the African American community at large.

Clarence Jones: So, you've just experienced why the community loves Dr. Brewer. She has mentioned my name about four times, she'll mention the community members, you know, the same thing. I mean, it's you know, it's authentic and that's what's important in terms of making this process, you know, very, very effective. But the app is something that I know that people love. They like being a part of it. They like the idea that they participated in it. I mean, we talked about them from the very beginning. And so, it makes a difference. It makes a difference in terms of even how people receive the information and additional information because they understand now the importance of their health. And so yes, the app, I guess maybe I've missed a question, but I just I think that's part of it.

Dr. O'Connor: Well, first of all, congratulations to you both because to create a tool that can be so accessible to so many people, regardless of their socioeconomic status, right because an app is simple and an app can be free, and, you know, everyone on the, almost everyone on the planet has a cell phone.

Dr. LaPrincess Brewer: Yes.

Dr. O'Connor: They can, you know, put an app on the phone. So that's just very commendable.

Dr. LaPrincess Brewer: Thank you.

Dr. O'Connor: And I'm really looking forward to following your progress with this and seeing how that is going to continue to impact communities across our country.

Clarence Jones: Thank you.

Dr. LaPrincess Brewer: Thank you so much.

Dr. O'Connor: So, Dr. Brewer and Mr. Jones, it's really been such a pleasure to have you both join us today. I want to thank you for all that you've shared with us, and we hope that we can continue the conversation on a future occasion.

Clarence Jones: For sure. Thank you.

Dr. LaPrincess Brewer: Thank you for having us and our community.

Dr. O'Connor: Yes, you're very welcome. And thank you to our listeners for joining us today and for making the Health Disparities Podcast, one of the world's leading health equity podcasts. We'll be with you again in a couple of weeks. Until then, it's goodbye for now. Be safe and be well.

(End of recording)