Technology is helping to treat the maternal health crisis with Toluwalase Ajayi, MD

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Featured topic and speakers

Gaps in research make treating the maternal health crisis even more challenging. However, the PowerMom platform is pioneering an innovative way to use digital technology to close those gaps and improve maternal outcomes. Joining us to discuss is the lead researcher behind PowerMom, AMA Board Trustee Toluwalase Ajayi, MD, director of clinical research at Scripps Research Translational Institute. AMA Chief Experience Officer Todd Unger hosts.

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Speaker

- Toluwalase Ajayi, MD, director of clinical research, Scripps Research Translational Institute; AMA Board of Trustee member

Transcript

Unger: Hello and welcome to the AMA Update video and podcast series. Recently, we discussed rising maternal mortality rates in the U.S. We got a lot of feedback on that episode. And today, we’re going to hear about how digital technology is being used to address this alarming trend by improving maternal health research.


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I'm here with Dr. Lase Ajayi, a palliative care and pediatric physician who's the director of clinical research at the Scripps Research Translational Institute in La Jolla, California. She's also a member of the AMA Board of Trustees. I'm Todd Unger, AMA's chief experience officer in Chicago. Dr. Ajayi, it's a pleasure to have you on the show.

Dr. Ajayi: It is a pleasure to be here. Thank you so much for having me.

Unger: Well, in a previous segment that I mentioned, we touched on the challenges that pregnant patients have and answering their questions and finding evidence-based information about their pregnancy. Dr. Ajayi, what gaps are you seeing in medical research around maternal health?

Dr. Ajayi: That is a fantastic question. One of the biggest gaps we see is honestly in the diversity of voices that participate in clinical research in pregnancy health care. We know that pregnancy research is already difficult to recruit and engage participants in. So that when you look at that disparity, having diversity in the participants is a huge gap that currently exists.

Unger: Now, you're the lead researcher with PowerMom, which is taking a very innovative approach to closing some of these research gaps. Tell us a little bit about the work that you're doing with PowerMom and the digital tools that you're taking advantage of?

Dr. Ajayi: With pleasure. So PowerMom is a bilingual mobile research platform that really brings research to our participants using a smartphone. We know that right now 90% of women in the United States own a smartphone. We know that 80% of Black women in the United States own a smartphone. And that currently 73% of those Americans making $30,000 or less in the United States also own a smartphone. So we know that we can reach a large audience using smartphone alone to collect data.

By using this and building a community, a large community of diverse research participants, and bringing the research to them, we can make it really easy to participate in clinical research. We don't have to miss work. We can collect data by using something as simple as a Fitbit and Apple Watch to collect that biometric information and use validated surveys to collect information that we need that we don't have access to right now.

It's a simple, easy way to use a powerful tool that most people have access to.

Unger: That makes a lot of sense. How many people have used the PowerMom platform to date? And how much data have you been able to collect?

Dr. Ajayi: Oh my gosh, we have a abundance of data right now. So when we actually first launched in 2017, we were able to recruit over 4,000 participants in just a three-month period. And that was really easy to do because at that time we were actually embedded in the WebMD Pregnancy app. So
WebMD had this amazing pregnancy app that they were promoting. And we were just easily embedded into that.

Right now, we wanted to take that out of the WebMD app and actually work with a bunch of different digital partners and actually be able to sustain engagement. Right now, we have over 14,000 different data points from really participants all over the United States. So we are able to reach pregnant people all over the United States and our U.S. territories. We actually have participants in Costa Rica as well and it's pretty exciting.

Are where we want to be right now? No. Because honestly, I want to be at about 10,000 participants right now. And we're short of that. So there's a lot more that we need to do. I say 10,000 because when we reach 10,000 participants, we can then do things like digital twinning, allowing our participants to compare themselves to other pregnant people across the nation, really give that information to our participants and empower them with their own data.

**Unger:** Wow, that is exciting. I'm curious what new insights into maternal health or research opportunities that you think you can unlock with access to that many people and that kind of remote real-time data that you wouldn't be able to do with, say, more traditional monitoring?

**Dr. Ajayi:** I am so glad that you asked that question. Because as you said, I'm a pediatrician and palliative care physician. I have an interest in this because I want to get the data out to those who can use this information. We know that when we enable AI technology, we can actually then use this data to anticipate and predict who's going to be more likely to have these negative outcomes, can we anticipate who's going to have preeclampsia, who's going to have these devastating maternal outcomes and severe morbidities, and then share these with our health care providers, share this with health care systems so they can make changes in their palliative care.

They can make changes at the bedside and really also empower our moms to then make changes in their behavior. So again, enable the moms, but also enable the health care providers, enable the health care system, and maybe even change the way that care is reimbursed. Can we reimburse and actually provide a Fitbit to our participants if we know that this can decrease readmission, really have our patients come in sooner. It can change the way that we really practice medicine and that our participants engage with the health care system. It's really exciting.

**Unger:** Indeed, it is. While you gain all of this new information based on all this remote clinical information, you're going to have some amazing discoveries. Unfortunately, these days it's hard to talk about new clinical information without also talking about misinformation. I'm curious, are you seeing a rise in misinformation about maternal health over the last few years? And what are the major misconceptions?
Dr. Ajayi: You know, luckily, we’re actually not seeing misinformation around maternal health. And we’re lucky about that. What we actually are seeing, though, as we see the intrusion of government into the practice of medicine, we’re actually seeing a huge distrust on how to share the information with health providers, with researchers, right? It’s dangerous to share information about your pregnancy status. And so really the population that we want to engage to share the information to participate in research, it can be scary and dangerous for them.

So this intrusion into government, into our bedside, into our clinical care, affects how we can participate, how we can provide care for our patients. So really showing that we’re a trusted research platform, that your data is safe with us, that’s really the biggest issue less than misinformation. It’s how we create trust and create a place of safety for our participants.

Unger: Now, this is just such a great example of combining the power of data, and community, and much greater depth of diversity of participants in this kind of research. So it’s incredibly important and more necessary than ever as we look at the stories about maternal health care out there. If physicians have patients who want to get involved in your research, what should they do?

Dr. Ajayi: They should reach out to us on all the social media platforms. Really directly email us at powermom.scripps.edu. That's the best way to get information. We're also on Instagram, Twitter and Facebook. So just look up PowerMom and you will find us on those platforms. But also, powermom.scripps.edu is the best way to get in touch with us.

Unger: That's excellent. I encourage everybody out there to get in touch. Dr. Ajayi, thank you so much for joining us. What a terrific new initiative that you're working on. We'll be back soon with another AMA Update. In the meantime, you can find all our videos and podcasts—ama-assn.org/podcasts. Thanks for joining us today. Please take care.

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