#### Speaker 1 (00:04):

Welcome to Community Conversations on Vaccines, presented by Immunization Advocates. This season, our guests will help us explore the link between vaccine equity and acceptance and how to build and sustain community trust and immunization.

## Vince Blaser (00:18):

Welcome back to Community Conversations on Vaccines. I'm Vince Blaser.

## Francesca Montalto (<u>00:23</u>):

And I'm Francesca Montalto.

## Vince Blaser (00:25):

Well, Francesca, coming off our last episode where our guests talked about the challenges health workers and media trainers are facing navigating the thick of information about vaccines during the pandemic, I'm really excited today. We're going to dive deeper into the topic of helping communities navigate the seemingly ever-growing challenges of misinformation and disinformation.

## Francesca Montalto (00:47):

Agreed, Vince. Of course, inaccurate claims on vaccines is nothing new but the way this pandemic affected nearly all facets of life around the world has really elevated the volume of information of what the World Health Organization has termed the "infodemic." Experts are just starting to have conversations about the impact the pandemic has had on how communities navigate decision-making on vaccines.

### Vince Blaser (01:11):

Yeah, and on that point, we're really excited to bring our guests on today, the Kenyan researcher, Dr. Caroline Aura and Brazilian journalist Yael Berman, both have been in the thick of this infodemic on vaccines, Caroline and Yael, welcome to the show. Dr. Caroline you spent your career around the maternal and child health services, and we understand that some of your experiences in that work led you to design and propose a research project and Trans-Nzoia, Kenya, can you tell us the storywhat happened with that?

### Dr. Caroline Aura (01:48):

Yeah it was quite interesting because I was doing my PhD research in Trans-Nzoia and I was dealing with farming households. So I just had a conversation with a lady, I think she was around 21, and she was living right next to the hospitals and she wasn't taking the kids for vaccination. So I got interested in why, and when I asked her, she just told me, I'll go, if you take me. And I was like, wow. So she explained to me that if she went alone, she not be acceptable because of the way she earns living. She she's not clean, and so she'll be forced to, to clean herself up. But if I went with her, they would they would not chastise her or say anything. So it got me interested because the other women also started talking, it opened a door.

### Dr. Caroline Aura (02:37):

So they started talking to me about why there was a lot of dropouts in vaccination and why they were not visiting the healthcare providers there. So I got together with my colleagues at the University of

Nairobi, and then we decided, okay, why not come up with a program on how to incentivize these women so that they can vaccinate their kids? Because if we talk to them, they know the importance of vaccination, but they have reasons, and the healthcare providers are not listening. So we came out with the first project, which was Backwards for Family Nutrition. So it was like if you take your kids to vaccination and because your farmers would give you an incentive like seeds that you can plant. So then we realized, okay, as we're incentivizing them, the women now who are the mothers, when they got pregnant, they're not going for what they call antenatal care.

## Dr. Caroline Aura (03:29):

They're not also going for vaccination ouside so we thought what should we do? So we asked them, it was the same reasons. Now we came up with the next project loyalty, that is if you are loyal to vaccination for yourself, and you're allowed to keeping the four visits, you go for ANC, if you're pregnant, then you can be you can be given not an incentive, but a discount. So it was like, you get loyal, and then we've talked to our business friends in the area, and they can give you a discount on anything you want. So you get vaccination, but you get what you want to buy at a discount. So the loyalty program also worked so well that it backed what we call Grain Bank and Vaccine Link, because in incentivizing them to buy good seeds, the production was high.

## Dr. Caroline Aura (04:19):

So now they were harvesting a lot more and it was getting wasted or the, the business people were buying it at poor price. So they complained again. So we decided to come up with Grain Bank, which is that we could bank their grain, or sometimes we could get markets for them. And they would be remain loyal to their vaccination. And also because they'd said it was vaccination days, they would go and they would not find vaccines. So it was like so we could link them to hospitals where they got vaccination. So that worked well. And then we got,we got the other one, where they said, okay, now we are taking kids for vaccination, but there's a pain issue, and nobody's listening. When, when I take my kid to the hospital, I come home, I have to say for three days the kid is crying and I'm a farm laborer.

### Dr. Caroline Aura (05:09):

And what should I do? So after that we came up with a project that was about pain mitigation. And because we were working the frontline workers, we said, okay, fine, because there are simple ways to mitigate vaccination pain. So the healthcare workers could help in this, if they were taught these skills. And so that's what we were doing. Then COVID came and now it's changed everything. And so we're like, okay, now we are dealing the new situation whereby we have COVID and there's the people are not now interested in vaccination anymore because nobody knows what COVID is. And there are many misinformations like, hey, you'll get it at the hospital, something like that. And that's how we wrote the proposal to Sabin Institute about COVID misinformation, because they thought it would affect even the EPI, the normal vaccination for kids.

## Francesca Montalto (06:04):

Yael, we know that you do fact checking for misinformation in Brazil for AFP, one of the largest wire services in the world, and you have been putting out fact checks left and right about the pandemic to Caroline's story, you recently shared, needing to fact check a viral story in Brazil that was being circulated. What was that about and how do you as a reporter respond to that?

Yael Berman (<u>06:28</u>):

Yeah, so it was also related to child vaccination, and it was a video of a father desperately crying for his son who allegedly died after having the COVID 19 vaccine. And I noticed it was circulating on private messaging apps, and it started to be shared on social media platforms as well, such as Twitter and Facebook. So I went on to do some research with online tools we use as fact checkers. So I was able to find the original video, which was shot back in 2019 in the beginning of February, in this case, for example, I addressed it by doing this reverse image search, and also searching by keywords on the platforms YouTube and on TweetDeck, and then I was able to get to the original video which back in 2019 and I saw I could find the original place where it took place.

## Yael Berman (07:27):

So the video circulating online recently said it was shot in the state of Paraíba, which is in the Northeast of Brazil. But actually when found the original one, I saw it was shot in the state of Amazonas which is in the north of Brazil. So besides explaining to the public that the video was old, and I showed it by linking to a tweet by local media who did some coverage about it. I also talked to the health departments of both Paraíba and Amazonas, and Paraíba denied that happened there and the Amazon's health department confirmed that these images were from 2019, and happened in one of their hospitals. This way I could explain this was not related to child vaccination and especially COVID-19 child vaccination, because it was in 2019. And I think I mentioned some background in vaccines for children in Brazil as well, to give some context to the public.

## Vince Blaser (08:41):

Maybe just expand on that point a little bit. We know that Brazil has a strong history of high demand for vaccination, but as you know, most locations that have been, as in most communities have been challenged with this whole information overload during the pandemic. Can you tell us a little bit more about how the pandemic has shifted kind of your work as a journalist and even how you approach fact checking?

### Yael Berman (09:10):

So it impacted directly actually not only mine, but my colleagues as well because now we spend a big amount of time covering science, which is something that wasn't actually happening before, because, as you know, there are loads of misinformation on the COVID 19 pandemic and loads of disinformation on the vaccines. For example, people describing severe adverse events, such as the video I just mentioned, but also there are many mentioning myocarditis as well. There are many people arguing that COVID vaccines have been developed too quickly, and therefore they're experimental or maybe just stating that the vaccines don't work. So we analyze these myth and this information pieces considering the potential harm it can cost people if it can cause them not to vaccinate their children for example, or not to vaccinate themselves.

### Yael Berman (10:12):

There's a thing we would like bank, for example, especially if it's widely shared. So I think of course it changed in a way that now we have, not that there wasn't science coverage before, but now there's maybe yeah, more special coverage on this issue, and because of that as well, I took part the the Infovaccine program and also in partnership and the support of Sabin, which basically supported journalists do a better coverage of the pandemic kind of putting together journalists with scientists. We had lectures on the immune system vaccine technologies and many other aspects of the pandemic in

order to help us achieve more people and do better our work by covering this, in my case, this Mis and disinformation pieces and debunking it.

## Vince Blaser (<u>11:32</u>):

Right. Your examples and Caroline's are rooted in the issue of people trusting or not trusting the information that they see right in front of them. I think that this is a dominant discourse in what we're seeing in many facets of life today from war to politics, and certainly is fundamental concept for vaccine acceptance. Caroline can you say a little bit more about your research study and how you have been looking at trust and where you are in that and, and how you know, people's responses in terms of trust in the system or vaccination are not fixed, but are kind of more on a continuum. Can you tell us a little bit more about that?

## Dr. Caroline Aura (12:31):

Yeah like I said, when COVID came, it's changed the way people not only live, but even the way we do research and you see people became more social media people, I think. And you could see actually misinformation is taken more seriously because they're looking at who's talking about who is who's telling us like I give an example, like in Kenya when the government spokesman would stand up and say "you need to do this..." and then they would say, no, because they're looking at the background, there is something there that money will set aside for COVID and you are not telling us where it went, we are still paying for COVID. So they look at that information, like, no, that's a hoax, but we looked at it like okay, who are the trusted voices that can speak to these people?

## Dr. Caroline Aura (<u>13:25</u>):

So, let's say in an acceptance continuum, that we come up with, it's people don't just accept or refuse, you have the gray areas, I think that's how life is someone may say, okay I may do it, but, so there's the, the interesting part of it is those who have not made up their mind. So if you can analyze that continuum of the people who like in our case, there are people who are like, okay, I could take the vaccine but now we need to know why, so that we can craft messages to change their mind, you know? And that's where like, trust comes in, like who can speak to this group to trust them enough, to change their mind, because they're saying, okay I could tell the vaccine, but I saw

## Dr. Caroline Aura (<u>14:11</u>):

Something that we saw Vince, something small like an adverse effect that maybe happen to someone, to many people, it's not important, but the person will be thinking, but this affected someone. So how about me? So there's that bad. And so in that continuum that we saw, we saw, okay, there was the few who said in general public, who said they would not take the vaccine. And then there are those like around 84% who said, yes, we would take it. But there were those in the middle that interested us who said, okay, we refuse, others weren't sure, others say they would delay. So we captured it to in order that if you are a policymaker crafting messages, you think how we cross a message for this cohort.

## Francesca Montalto (14:54):

Yeah. And, and with this research you know, how important is community-based participatory research? How important is, you know, knowing and working with the community while you're doing this research?

### Dr. Caroline Aura (15:08):

It's really important. I had a professor used to say, if a technology does not find a home it'll be kicked out. And that is true. Vaccination is like a technology, so if you bring it to a place where people will not accept it, then you'll keep pushing 'em to them to, to keep it. But it, it comes in a way that through people they trust, or something they've started, like, let's say, if you want to come up with a community-led intervention for vaccine upkeep or demand, there are certain things you look at, you'll have to sensitize the community, which you'll need the community members. You'll have to, to provide education on what this vaccine is doing, or how many times should they come? And then you have to mobilize them.

## Dr. Caroline Aura (15:55):

Now, the problem is the first two sensitization It's always like from app. We'll call a meeting and then you come, we'll tell you, we'll give you this information you have from the scientists, it's like this. And then the people are like, "oh, it's not us," when you tell them to come to the hospital, they don't not come. But how about, let's say someone who's religiously inclined, when you tell them, okay fine, we have this, how about your religious leaders can do this? They'll put that message in a way these people will accept, so if you involve the community and then you'll also cater for something we've thought from the ground, you see, like the vaccine system is like, we call it formal. It's a system and it's a formal system, but then like, people's livelihoods are formed differently.

## Dr. Caroline Aura (<u>16:44</u>):

So they're different people with different livelihoods and different opinions. So if you are gonna speak to them in a certain way, a certain message, they'll mostly highly likely not accept. But if you get people who can talk to them from a perspective that they understand from their level, they'll know, okay, this is ours. We're the ones who, we participated in, this is for our good. So then you not have to keep pushing them, go, go get vaccinated. No, they'll even mobilize each other. And that's what we found.

## Vince Blaser (17:14):

Yeah. And even when you have local messengers who gain the trust of community members who might have vaccine acceptance issues, there really remains an ever present issue of the massive streams of data that are coming out about COVID-19 and vaccines either being deliberately or indeliberately distorted, which we've especially seen in media. Yael, I know this is something you are regularly correcting, and there was a major example of that phenomenon during the Omicron wave in recent months. Tell us a little more about that.

# Yael Berman (17:51):

Yeah, sure. This is a recent fact check I did on UK data Rio, UK data that was shared without real context. So this can cause misinterpretation and lead to harm and cause misinformation. So online posts claimed that individuals who died the most in the UK were the vaccinated ones, but they didn't consider many factors such as, for example, that the UK has high rates of vaccinations. So absolute numbers should not be compared this way especially in, in the case of UK and considering that more and more countries have a larger number of vaccinated that in vaccinated individuals. So I explain in this fact check that doing this comparison would be a mistake which is known in statistics as base rate fallacy, it's when the size of the population is not considered

Yael Berman (<u>18:55</u>):

And the fact that one group is much louder than the other is just ignored. When I looked into the UK official report, I noticed that they did several explanations on how those numbers should be interpreted and more than the base rate fallacy. They also, for example, mention important characteristics of those groups analyzed in the reports, such as, for example, the fact that the ones who are fully vaccinated there tend to be the older ones or the ones who have underlying conditions which make their immune system vulnerable, for example. So there are many factors that I have explained there. I research data, I talk to scientists and try to explain how real and correct data can also be used to spread this information.

## Francesca Montalto (19:50):

You bring up something that's so important. I can't tell you how many times I've been scrolling social media and I've seen statistical manipulation and it's so, so frustrating because you're right. People will use real data, but they'll manipulate it to make it look like something else is an issue. Now Sabin recently hosted the Vaccine Acceptance Research Network conference back in March, a lot of what was discussed was vaccine confidence, vaccine misinformation, and vaccine acceptance, and there was this one point that was really eyeopening for me where a researcher said, vaccine acceptance can be gained, but it can also be lost. So Caroline, I will move to you. What do you feel is needed to sustain high levels of vaccine confidence and acceptance? How do you feel public health and political leaders can improve our response to pandemics, to misinformation, to anything related to disinformation in the future?

## Dr. Caroline Aura (20:50):

I just wanted to add on what you are discussing with Yael, when there's a vacuum, like in the knowledge people are looking for something and they're looking for trusted voice, because something like a pandemic is when they don't get like cohereent information, just like being said, there's a lot of information coming in. And so they're looking for, okay, so who is saying the truth and, and how would this affect me? So when it press those vacuums, that's why people like on the social media, there are people who maybe something happened to them. They'll take that chance to, to come up with certain information. And I think that as little as it looks, it makes sense to many people who are in that situation. And I think what the governments need to do is to deal with this misinformation.

### Dr. Caroline Aura (21:41):

And I'm glad that Yael and the group are doing that. I wish that would happen in Kenya because misinformation is actually more dangerous to vaccination for us, like researchers in this area than any other thing, because now when the world is interconnected like this, and people are passing misinformation, and if the government does not find a way to deal with this, and by involving people who people can listen to, so they can deal with it immediately as it comes up. There there was a situation in Kenya where it'll say like, this is really a hoax. And it's the government wanting to gain some money or sympathy. And yet people are dying and thought it was really sad, but it took a while.

## Dr. Caroline Aura (22:30):

And I think because there are clever people, they realize, oh, there has to be something more. But then I wish then if it had just been like someone debunking, like the government not hiding from this, but saying in a way that people see it is actually true. And you can only do that if you are talking to people from their perspective on this thing, I don't think there's any information that someone will not understand. Like if you're talking, let's say for someone who's a politician, we have, like, now it's a campaign season. If the politicians in Kenya, like they have people who, who really follow them, if they

were to say something about COVID, the people would actually believe it. And so these are the process we are saying. So, if they took in consideration that one size does not fit all. It may take a lot of money or resources, but how do we talk even to the different people, give them information, maybe on radio with people they can understand. Cause we found out that most people had the got information from radio and WhatsApp. Like they had groups that we were following,

## Vince Blaser (23:34):

As we talked about at the beginning, those utilizing public communications channels to put out misinformation or disformation on vaccines is definitely not new. It's been going on for a long time, but it's, I think the onslaught of it during this pandemic in particular and, related to so many areas has been a bit overwhelming for the public health community, to be honest. I think you know, still sort of grappling with the best ways to really address it going forward. Yael, as you know there are major campaigns in nearly every country to, to increase uptake of vaccines as well as ensure that children continue to receive the routine immunizations that have saved, you know, millions of lives every year. So you know, most of these campaigns are really asking the media and journalists to, to be very supportive of them, but what do you think that, you know, public health and government leaders have done well there and, and what do you think that they need to do better to sustain trust in vaccines?

## Yael Berman (24:49):

I think this relationship is extremely necessary and it is fundamental to better communicate to the public especially in a pandemic where people are kind of vulnerable to new information. So I think we have a lot to win by strengthening this relationship and we could have a taste of it at Infovaccine, as I mentioned before, how we could better deal with the pandemic coverage while taking part in a program that put together journalists and health professionals. But something I would like to add, especially concerning Caroline's speech, is that I think we have to consider also access to information. In Brazil, for example, we have high social and economic inequality rates. So many people actually don't have access to stable internet connection or to smartphones and computers, and even maybe media literacy because you don't have to have access only to the object. You have to know how to access them as well. Well in order to journalists and governments better communicate on many topics and on the pandemic I think we need to kind of think of solutions to surpass these barriers, you know, because otherwise people cannot access this information, we will not move forward.

## Vince Blaser (<u>26:34</u>):

Well, I know we're kind of at the beginning of this road of battling this infodemic and what you are both doing in your fact checks, in your research, in your communications with the communities you work with and the government it's, it's really helping your own communities, but also give us great insight as to how, how we can collectively push forward and, and create and sustain that trust long, long run. Caroline, Yael, we really appreciate you joining us today,

## Speaker 1 (27:13):

You've been listening to Community Conversations on Vaccines, presented by Immunization Advocates. For more information on our guests, please visit immunizationadvocates.org/podcasts.