## Catherine Kyobutungi

Okay, hi. I'm Catherine Kyobutungi, I'm the executive director of the African Population and Health Research Center. It's a center based in Nairobi, Kenya. Yeah, it has the Pan African mandate. And really what we're trying to do is to make African voices count. In decisions that are made, and that affect the development discourse of Africa. So what that entails is that we want voices to be heard, but we want these voices to be informed. And as a result, we use evidence as the metric of measuring whether voices are informed or not.

So we do a lot of research, but then we do research that we term to be policy relevant. So our research is accompanied by a process to ensure that the evidence that comes out of that process, or the evidence that comes out of many other processes, is used in different decisions. And we've had a broad range of policy actors, we don't just look at government as policy actors, because government has a role to play but then there are many other policy actors, there's civil society, there are communities that can, you know, take charge of their own decisions and their own health.

There are technocrats, there are parliamentarians that legislate about different institutions that government takes. There are international NGOs, there are multi laterals. So we have a very broad range of what we term as policy actors. So our approach is to have our researchers do a lot of research, you know, as I said, we're research institution. However, we've invested in processes, whereby our researchers are encouraged and supported to make very strong sustained relationships with a defined set of policy actors. And so going back to the question about, you know, how to get actual evidence use or data use or data science or you know, whichever way you want to term it. Is that data science or data use or evidence use is not a one off, is not a hit and run is not an ad hoc process. It's a process that is embedded in relationships that are built over time, that are mutually beneficial, that are respectful, that have value before the evidence is available. And that have value even after the evidence is no longer available.

So what we do is to find mechanisms and forums within which our researchers start, you know, having these kind of relationships with the diverse, you know, pool of policy actors that I mentioned. They go for meetings, they sit in seminars, they read documents, and many times maybe I would say for 70% of the time, there's no opportunity to provide evidence, but they're there as trusted partners, as experts in a specific field. And therefore, what we've done is to narrow down the specific areas in which we want to see policy change, or they want to see actions change. And so our researchers sit in these different

forums of engagement, and only when it's opportune or only when it's relevant or when only when it's necessary to provide evidence, then they provide evidence.

So the key thing is that evidence is actually viewed as just one lever in a whole process that takes different shapes, different forms, a lot of time. And so it's not that the researchers go in there, and their sole purpose for their being in there is to provide evidence, so that evidence can be used. So by forming these long term sustained relationships, we've been able to find those opportunities where evidence was needed and provide it and then then the uptake in that case is much more, you know, high as you'd expect, of course, the investment in time and resources is quite a lot, but in the end when there are results, its worth it, those years of investment actually worth it.

One of the most exciting things that I find about this kind of approach or the value of data science, or the value of data use or evidence use, is the potential to get it right. Because I think there are many decisions that are made. As I've said, if you look at the broad range of policy actors, and if you look at policymaking as a way in which decisions are made that actually affect people's lives, if you look at that broad range of actors, there are many, many decisions which are made. And it's not only when, for instance, a health policy framework is being made, that decision is being made is not only when, for instance, parliament is legislating about something, that decisions are made. Decisions are made constantly by all these policy actors. And so having experts that are present and that are going to provide evidence when it's needed to inform those decisions and make them better. That's what makes this whole, I mean, this whole approach exciting because there's potential that we might actually get things right. And the absence of these long term relationships is sometimes what results into decisions being made, that are either based on bad data, old data, irrelevant data or evidence. Or the absence, decisions are made without any kind of data, you know, providing input into these decisions. So that's what's exciting. And we have quite some good examples where this long term sustained engagement has result in what we see as tangible impact on people's lives.

That's our ultimate aim. That our researchers, it's nice they publish papers. But for us, impact is not the impact factor of the paper, or how many times it's cited. Impact is when that person has published those papers, has enough evidence, has enough expertise, and they can actually provide input into decisions.

So we've done, I'll just pick one example. We've done a lot of work research around early life nutrition, where we started by understanding the prevalence, you know, breastfeeding practices, trying to understand, for instance, how women in poor urban areas complied with WHO recommendations on breastfeeding.

And our results were quite shocking, where we found that there was very low prevalence, for instance of what we call exclusive breastfeeding. Where infant is supposed to be fed nothing but breast milk for the first six months of life. And the reasons for that, for most of the women most women say they don't have enough breast milk because they don't have enough food.

So there was a lack of understanding of the breastfeeding, I would say biology, but also a lack of myths. Lots of myths around breast feeding. And what turned out was that most of these women go to private health facilities, that's where they deliver and that most in most private health facilities in this, in the country where the study was done, there were no breastfeeding guidelines. So the healthcare providers that attended to these women did not provide enough information that the woman could use when they went back home after having a baby to support their choices if they wanted to do exclusive breastfeeding. So this work has evolved over time.

We've kept on building onto this piece of work, working with Ministry of Health, working with UNICEF, working with the local government, working with community health volunteers.

The work has evolved in a very large program, that's trying look at the different ways in which breastfeeding can be optimized in different populations. Because many women don't breastfeed for different reasons. Some of them is because they are in informal employment. And their employers don't allow them to have babies at work. Some of them cannot take time off to breastfeed. Some of them don't know about breastfeeding. Something like expressing breast milk was something which was unheard of in this population. So now we have a very broad program of work. That is looking at workplace support, is looking at human milk banking, is looking at how to support women in a formal sector to breastfeed, is looking at expressing breast milk without banking it, is looking at child care, you know, within informal settlements. So it's a very broad, range of interventions.

And what we've seen, is a significant increase in the proportion of women who breastfeed exclusively. But then something like human milk banking has broader impacts on your mental health, especially for babies who are born, you know, either when they premature whether they are sick or something like that.

So this is a result of a very long sustained engagement between our researchers and a diverse, you know, pool of policy makers and actors that over time have worked together,

to see what is important, what is necessary, what is most relevant, what is most urgent, and so this partnership has resulted in very many policy gains and unprogrammed design. That have had a significant impact, you know, on I would say breastfeeding, or early life nutrition within Kenya, where this work has been anchored.

So that's one, that's the, I would say the approach that we take as an institution. But some of the challenges when it comes to broadly, you know, data science and data use that we encounter is, there are two things. The first one being the data ecosystem, and the second being the culture of data use.

So when I talk about data eco system, if you look at the data cycle, the data value change, whichever, you know, frame work you'd want to use, there's data production with different steps, there's data manipulation or data management, it's on different steps. There's data analysis, and then there's data interpretation, there's data, you know, translation into things that everybody can understand, there's data use, there's data archiving, and then there's data reuse. And then the cycle goes back. So what we found in our work is that there's a lot of expertise, for instance, in data collection, and maybe very basic data manipulation and data analysis. But the other parts of the data cycle or the data, data value chain, many times the expertise does not exist within the, environments where you'd expect this to happen. So if I was to take policymakers like the Ministry of Health, you'll find that most ministries, of health will have a data or Health Information System department. Where there's a lot of expertise around data manipulation and data analysis. But beyond that, when it comes to interpretation, for instance, if a ministry is confronted with the prevalence of breastfeeding, let's say 30%. The interpretation would be expertise to say these are the policy options. And these are the policy choices. And this is the cost benefit of taking this policy choice. And therefore, if you took this policy option, you'd expect to increase maybe your prevalence from 30% to 50%. And this is the cost, this is the benefit, this is what you would lose. And this is what you would gain. But many times that expertise does not exist within the forums or within the environments in which these decisions are made. And beyond that, this as I said, data on its own, may not have much value to its users, unless it's translated in forms and formats, and in language that actually most people understand. So the expertise to translate data into a language most people can understand, also many times does not exist in these policy environments. Or the main environments in which these decisions are made. So there's a huge dominance of capacity in the first part of the data cycle around data production, data analysis, but very limited capacity in the latter part, or the downstream parts of the data cycle. That's the first challenge that we've challenge encountered.

The second challenge is what we call the culture of data use. And when I talk about the

culture, it's not that people like using data, or people feel good about using data. It is systems and processes that are put in place. It is legislative frameworks. It is planning frame works. That actually mandate and require, that data is used before decisions are made. So when we have an absence of this kinds of systems and processes that mandate or that require data use, then you find that the culture of data use is quite poor, and so policy makers or policy actors, are more likely to use data when they have partners, for instance, like academic institutions or research institutions. When those partners are not actively seeking out this partnerships, then the technocrats or the policymakers are happy to go along and make decisions without thinking about the value of data. And so if we wish to change the way decisions are made, as academics or as researchers or as scientists, then we cannot afford not to influence even the data culture within the environment in which all these decisions are being made on a regular basis.

So those are the biggest challenges. And when it comes to the data ecosystem, or the data value chain or the data cycle, many times as I said, when we want to build capacity, we build capacity for analysis. When we want to build capacity, maybe build capacity for, you know, some kind of, some little element of the cycle. And what would be more helpful, is to see how to build capacity along the whole data value chain. There's already sufficient capacity in analysis and production, as I've said, but we need to start looking at how to build capacity in the other aspects of the data value chain around an interpretation, around translation, around communication, around dissemination, and then around use and reuse.

So really, when I see the the current environment where we are, as an African institution, those are the challenges that we encounter. We've tried in different ways to build those capacities. But ultimately, I think being able to successfully use data depends on long lasting, sustained relationships, that us as academics have to be willing to invest in with a diverse, you know, range of policy actors. And I'm in an institution where I've been for almost 15 years, and even as an institution, we've evolved over time.

Our initial model was disseminate. So would do data, you know, collection clean it, and then gather people in a room and disseminate to them. And many times, it was like, this is this is really great, and you guys are doing a great job. And that was the only success that we used to have. So over time, we realized that dissemination on its own doesn't work and we asked ourselves so what? What do we want to achieve as a result of this dissemination? So we started investing in trying to find different policies and different, maybe programs, designs that we could influence, if there was an absence of a policy would say, can we do research that we can make sure that this policy changes. And then over time, we realized that the problem in decision making is not the absence of policies.

There are hundreds of policies in the world. Actually, WHO is doing a database of policies in maternal, newborn and child health. And I think that the last count they had about 16,000 documents, so policies are not the problem.

And so when researchers or academics, we want to see how data can be used to influence policies, we need to ask ourselves, what is the problem? Is it the absence of a policy? Is it that the policy is outdated? Is it that the policy is not aligned, maybe with sustainable development goals? Is it that the policies there, but maybe it's not being implemented? And so if it's not being implemented, why would we focus on making another policy and not focus our engagement around how to make sure the policy is well implemented? If the policy is being implemented, we can also ask ourselves, is it being properly implemented?

So even as we look at the whole policy continuum, as academics we need to move away from assuming that, you know, default in new policies is actually going to solve any problem, because there are enough policies in the world. And what you should emphasize is to find out what is the problem? Why is there no change? For instance, in malaria prevalence. Why is there no change in stunting in a population? If it's not the absence of policies, then we need to calibrate our engagement, our influence, our evidence use to those bottlenecks that actually deter progress being made in the various dimensions we would like to see.

## Do you have any advice for researchers interested in data and health in Africa?

So my advice to academic researchers or other researchers that are not necessarily within academia, is that change takes time. And change cannot happen when it's being done in an ad hoc manner. Without strategic objectives, without knowing why things are being done the way they are being done.

And if I think anyone was to take anything from my talk, is that dissemination does not change the world. So we need to situate dissemination within a process of mutual partnership, of mutual learning, of mutual engagement. So that when we disseminate, it is feeding into some kind of strategy that we've devolved for ourselves. Where this dissemination is actually going to lead into some other actions. And it frustrates me to know and seeing dissemination being written in proposals and large grants, because dissemination is just that is a warn off that has very limited value in the ways that policies actual or evidence actually used by anyone. So that's the first thing. Let's invest in long term relationships.

The second thing is, let's understand what is the problem. And as I've just said, many times, it's not the absence of policies for why actions are not taken, sometimes policies exist, sometimes there are too many policies even for the same issue.

So what we need to do, is to do a systematic assessment of what is the bottleneck to, you know, success, whichever way success is being measured. And that bottleneck could be the absence of a policy, all the way to poor budgetary allocation to the issue in which you want to see change. And so once you have that understanding, then let's invest our evidence or whether it's generating new evidence whether synthesizing new evidence into that specific part of the policy continuum, where the bottleneck is.