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Podcast : The injustice of disease burden and access to vaccines

05 June 2022 | News

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The pandemic has been a global issue, which has benefitted from the coming together of industry, pharma, academia, non-governmental and governmental support. What it has also brought into sharp focus is the global imbalance access to healthcare and health inequity between the Global North and Global South.

For this important conversation, we are joined by Professor Linda-Gail Bekker, Chief Operating Officer of the Desmond Tutu HIV Foundation about the current situation with HIV and TB in Africa, and the impact COVID-19 has had on patients already suffering from communicable diseases.

So, what can we do? Lenias Hwenda, founder and CEO of Medicines for Africa, explains the additional problems of access to medicines and potential solutions for global vaccine inequity, working to make medicines as inexpensive as possible, and

improving the supply chain.

Transcript as below :

CONOR: Dodi, so it kind of feels knock on wood that we might be coming out the other end of this pandemic. What do you think?

DODI: Well, we should all still be careful. But sure, with that third jab in my arm and with the relaxed regulations in various European countries, I do see the light at the end of the tunnel.

CONOR: Yes, we don't want to jump the gun, but I thought it might be a good time to just think a little bit about some of the big tough questions that we faced, you know, through the pandemic. Because as we come towards the end of it, I think we've learned a lot about access to healthcare and health inequity.

DODI: Okay, so big, serious topic. No puns today.

CONOR: No puns. I think we're just going to dig into some of, you know, maybe the ethical considerations around how we get vaccines to all the billions of people that really, really need them. And I guess that's what matters on today's episode of *Discovery Matters*.

DODI: Conor, what sparked the topic for this episode on vaccine inequality?

CONOR: Yeah, I mean, you know, Dodi I was born in what was Zaire, now the Democratic Republic of Congo, and I have family all over southern Africa. So, I've got a real connection to the continent, it feels like my spiritual home, despite the fact that I can't get back there enough. At the beginning of the vaccine rollout for the COVID-19 pandemic, it was clear that the global south had made, you know, lots of contributions, whether it would be in clinical trials, and were starting to look at manufacturing, and so on. But when vaccine started being distributed, do you remember the big furor around access...

DODI: Sure, right.

CONOR: ...In non-rich, in the lower middle-income countries? Africa was kind of bottom of the list, and I wanted to understand this better. So, I met with two experts on vaccine inequality, distribution, and access to medicines. And I'm just really excited to introduce you to them.

PROF LINDA-GAIL BEKKER: My name is Linda-Gail Bekker, I'm the Director of the Desmond Tutu HIV Centre, and also run a foundation known as the Desmond Tutu Health Foundation here in Cape Town , South Africa.

CONOR: So, I spoke to Linda-Gail, about the state of response to both COVID-19 and HIV in Sub Saharan Africa. Of course, it's another communicable disease.

PROF LINDA-GAIL BEKKER: Yes, so the COVID-19 epidemic has been no less severe or devastating here in the tip of Africa as I think it has been around the world, perhaps more so because we also battle other communicable diseases, such as HIV and TB. And we have a huge proportion of non-communicable diseases, particularly amongst young poorer individuals, so people of low socioeconomic status so a multimorbidity.

CONOR: And look, virus epidemics are not new for people living in Africa. I remember as a child travelling around the continent having to travel with a World Health Organization vaccine passport, little yellow thing, or orange thing, and it listed all my vaccinations and it was checked at every border crossing, and it slipped inside my passport.

DODI: Absolutely, our family lived in Latin America, we also had those yellow passports. Absolutely.

CONOR: Yeah. And I kind of giggled with as people sort of thought how, you know, challenging it would be to have vaccine passports in Europe and North America when, you know, lots of countries live with them already. These countries live with communicable diseases as part of their health challenges every day.

PROF LINDA-GAIL BEKKER: And this has transported us all, you know, many decades back in so many ways. I am an HIV, TB infectious diseases specialist. So, I've been particularly concerned about the impact on the progress we've made in HIV and TB, and definitely, we have seen an impact on these other epidemics, which too often are forgotten, and I think have been particularly overlooked during the last 18 to 20 months of the last pandemic.

DODI: So, how did these two affect each other? What did the pandemic mean for the Desmond Tutu HIV Centre, for example?

CONOR: Well, Linda-Gail says that when the lockdown kicked in all HIV testing, all the tuberculosis referrals, dried up overnight.

PROF LINDA-GAIL BEKKER: And they took a really long time to come back. And I think this was a mixture of fear of contagion. So, number one, people, you know, didn't want to come to clinics, number two, they were so fearful they were going to actually be given a COVID-19 diagnosis which, you know, means all kinds of things, like "I are going to be spirited off to some quarantining hospital. And if I went into that hospital, I probably would never come out again".

CONOR: So, it kind of goes without saying HIV, TB, COVID-19, they're not comparable, but they have an effect on each other.

PROF LINDA-GAIL BEKKER: Almost 80 million people have been infected with HIV, which really is a lifelong sentence unlike COVID-19, and 35 million people have died, admittedly over a 40-year period, which might make it feel somewhat different. But certainly, in this country, where we have almost 8 million people infected with HIV living with HIV, you know, it's been devastating.

CONOR: The annual deaths from other communicable diseases are really important here. So, let's get into some numbers Dodi.

DODI: Sure, I'm here on the World Health Organization website (WHO.int). In the year 2020, more than 2 million cases of malaria, 627,000 deaths, and shockingly, 80% of those deaths were children under five. When it comes totuberculosis, 1.5 million people died, and 214,000 of those deaths were HIV positive people.

CONOR: So, the annual death rate from these diseases really went up as well because of the pandemic. And because the global north was so heavily affected by the COVID-19 pandemic, it warranted such aggressive action that perhaps was missing when we were talking about HIV and tuberculosis.

PROF LINDA-GAIL BEKKER: What has happened with COVID-19 is you've had pharma, you've had industry, you've had academia, you've had governmental, non-governmental, all coming to the party to say, how can we solve this problem? This has been in the most extraordinary collective, somewhat organized but nevertheless still felt at times, I think, like a feeding frenzy, but look what we've achieved through that. It's terrific. Whereas HIV, you know, by comparison with TB is had the lion's share, but it is, you know, again, orders of magnitude less than we've seen for COVID-19, and then TB and Malaria just sitting way behind in that regard.

CONOR: So, Linda-Gail said that the role of government has to be critical in managing epidemics.

PROF LINDA-GAIL BEKKER: Here in this country, I think we got a little more traction. Eventually, once we got past our denialism of the turn of the millennium. We had, unfortunately, an administration that did not believe in a virus causing a terminal illness. And, you know, once we got beyond that, then we did see quite an amazing sort of population-based response. But even still, we tend to see the bulk of the HIV in poor communities. Those who are rich could either be covert about it or you know, again, sweep it under the carpet to an extent.

CONOR: And sometimes it falls on the shoulders of entrepreneurs to help improve access to healthcare.

LENIAS HWENDA: My name is Lenias Hwenda. I am the founder and CEO of Medicines for Africa, a startup, social enterprise that has a passion for making a difference through a sustainable business model with a social impact.

DODI: Oh, okay. Hi, what exactly does Medicines for Africa do?

CONOR: Well, Lenias told me that they are real problem solvers.

LENIAS HWENDA: We solve the problem. Quality treatments, that are needed to meet the very basic needs of populations, are consistently not available where they're needed, when people need them. And often when they are available, they're too costly, and the quality is not certain. So, our mission is to improve the consistent availability of medicines of proven quality at prices that are affordable to buyers and in particular to patients because that's who we exist to set.

CONOR: So, Lenias is from Zimbabwe, and she's an immunologist by background and she realized that the challenge was

actually getting products that already exist to the people who need the most. This is what drove her into policy work.

LENIAS HWENDA: It was discovering that the issues of access to treatments, to medical products, that my community in Zimbabwe experienced whilst I was a child was not particularly or primarily because there were no treatments available to tackle those issues. It was really sort of growing up and discovering that part of the challenge was actually getting products that already exist, that we have, and at times that are not particularly expensive, but not taking them to the people that need them when they need them, or at a price that that allows them to be able to access those products, was the problem. And so, I realized that with that challenge, in fact, that was a bigger part of the challenge. And so being interested in having an immediate impact in people's lives, in communities, this really started to shift my interest towards the policymaking side of things to understand how the rules or how products are distributed around the world, to low- and middle-income countries to all countries are made.

CONOR: Lenias told me that one of the things that Medicines for Africa does is to get out of the office and actually visit as many countries all over Africa as they can.

LENIAS HWENDA: We've been all over the continent, in Ghana, in Kenya, in Zimbabwe, South Africa, Botswana.

CONOR: And there they talk to the people on the ground to really get a firm grip on what the real issues are that people are dealing with, with respect to getting access to medicines.

LENIAS HWENDA: So, cost is certainly a big issue that, on a continent where most people are paying out of pocket, the cost at which medicines are being brought to them, is so high that it's eroding household income and really contributing to the problem of driving families deeper into poverty. According to the WHO, half the world lacks access to essential health services, and 100 million people are sinking deeper into poverty every year due to the need to pay for medical expenses out of pocket.

DODI: Besides cost, what are some of the other challenges?

CONOR: Well, what you said was that supply-chain, believe it or not, is the biggest issue.

LENIAS HWENDA: Part of the challenge is the complexity of the supply-chain, how some supply chains are structured, the division of labor between the private sector and the public sector, the donor driven sector where you have bilateral partners, people who are operating in this environment, each one with their own system, and those systems aren't really talking to each other to make sure that things are done in an efficient, timely, cost effective way that truly serves the patient. So, you have quality issues also that are arising with antimalarials in particular.

DODI: I think it's funny how supply-chain has become a topic around our kitchen tables. I mean, thanks in large part to the COVID-19 pandemic, here it is affecting more health issues.

CONOR: And to top it off, Lenias explained that there are huge problems across the continent with substandard and counterfeit medicines.

LENIAS HWENDA: According to the WHO, 10% of medical products that are circulating in low- and middle-income countries are substandard and falsified. That's to do with the regulatory environment, the infrastructure that is available to provide oversight to make sure that the medicines that are coming in are coming from verified sources, they have proven quality and we know that they do what they're supposed to do. The supply-chain issues include, you know, the physical infrastructure countries not having adequate physical infrastructure for bringing in medicines, and not having efficient systems for procuring medicine.

DODI: What are some possible solutions?

CONOR: Well, for example, you could have a sort of an A-to-Z system within countries. So, local manufacturing rather than having this large slow manufacturing global system that you basically have in-country for-country manufacturing. So, the control of the supply-chain is basically inside the country where the medicines are used.

LENIAS HWENDA: An example of a country that has done very well in this is South Africa, they have consolidated the way they are buying medicines in the market. I think that that's really helped in terms of improving the availability of medicines and controlling the cost to patients, the cost to which patients are actually accessing those medicines. One of the things that they've done is they provide framework contracts in the way they buy. So, they're buying long term they don't buy every six months or every year, they provide a framework contract to suppliers, who then know that they have to supply these products at these timelines to South Africa. That brings predictability to the supply-chain, making sure that medicines are available

when they needed and where they're needed.

CONOR: And now if we get back to Linda-Gail at the Desmond Tutu HIV Centre, it's important to recognize that the way in which COVID-19 was tackled was predicated on our response to HIV, we learned from the HIV epidemic.

DODI: So, we may have learned something!

CONOR: It's nice to have learned something, isn't it? While we busily unlearn things over and over again.

DODI: Every day is a school day.

CONOR: Yeah.

PROF LINDA-GAIL BEKKER: The same clever people in laboratories who were trying to solve the HIV problem, and the RSV problem, and the other pathogens, trying to find vaccines, could pivot and take a lot of that technology immediately forward to solve the COVID-19 problem. And that, you know, I have followed people like Barney Graham and the guys at the VRC, and others, they were not the only people who immediately were able to say, "Well, let's take all this cache of information, lessons learned and apply it to this problem."

CONOR: So, Linda-Gail says, this essentially gives her hope.

DODI: It gives me hope too! I totally get it. So, having that kind of rapid response to a new pathogen would be exciting and important, and would be proof of having applied what we learned from the past.

CONOR: So, unfortunately, there's still this huge imbalance in terms of the power of nations and Lenias referred to this as a 'lack of bargaining power'.

LENIAS HWENDA: We've seen the most powerful countries, we've seen vaccine nationalism, we've seen export bans, we've seen vaccine hoarding, we've seen unfair distribution practices. So, these are just a fact of life when people have control of manufacturing, what I believe that is really needed, is having a globally distributed manufacturing capability, where you have all regions having some level of significant manufacturing capacity so that when you have an emergency such as this, you have all regions being able to at least produce some. And there are advantages for everybody. This would benefit everybody, all the countries in the world.

CONOR: And the imbalance between, you know, what we now call the global north and the global south or wealthy countries, and lower- and middle-income countries, is something that Linda-Gail is really keen to get across when she thinks about HIV.

PROF LINDA-GAIL BEKKER: Sadly, it's feels very deja vu because we were here 25-30 years ago with the antiretrovirals. We haven't stopped that epidemic yet. Luckily, and thankfully, and miraculously, and through lots of advocacy and activism, we do not have some of the most affordable drugs in the world, and we are able to access the treatments. But, you know, move forward 20 years, and we're doing exactly the same with the vaccine.

DODI: Oh, a minute ago, I felt hopeful. And now, she says it feels deja vu, maybe we haven't learned. But is it that a different approach can come in the form of equitable access? Let's bring us back up. I'm getting whiplash now.

CONOR: This is how the world goes, right? It's cyclical, you learn and there are setbacks, and so on. But there certainly is hope. I just love the resilience and the innovation that comes out of, you know, anywhere where resources are constrained. It's one of the most extraordinary things that you see in humanity is that when resources are really tight, really constrained, innovation thrives. People find a way. And I love this, and I love seeing this in Africa.

DODI: Sure. What we've learned, I think in this episode is innovation thrives, we are learning from the past, and actually governments are coming in and doing what they can to be productive. And there are global concerns where we actually do unite for the improvement of human health.

CONOR: It is and the truth, however, remains that we can always do more, we can always do more to be fairer, we can do more to treat all nations around the world equally because we know an epidemic or a pandemic anywhere in the world is a threat to everyone in the world. So, it's not over until it's over for everyone. So, with that our executive producer is Andrew Kilin, and this podcast is produced with the help of Bethany Grace Armitt-Brewster. Editing and mixing is by Tom Henley and Banda Produktions. My name is Conor McKechnie.

DODI: And I'm Dodi Axelson. Make sure you rate us on Spotify or whichever platform you use to listen to us. We'll see you

when we come back with another episode of *Discovery Matters*. Thank you for listening.