

EPISODE 12: CHAMPIONING HEALTH EQUITY IN SOUTH AFRICA

Garry Aslanyan [00:00:04] Hello and welcome to the Global Health Matters podcast. I'm your host, Garry Aslanyan. I'm delighted to welcome you back to season two of our podcasts, where we will be bringing you both more experienced and emerging voices in global health, capturing a range of perspectives, especially from those in low- and middle-income countries. We kick off this season with the first episode with a focus on access to medicines and vaccines. In the past two years, improving access to COVID treatments and vaccines has become a global movement, bringing together leaders, scientists, citizens in a unified voice. The People's Vaccine Movement expressed their call to leaders to coordinate response to resolving this unprecedented crisis of historic proportions, and they've been asking and urging global communities to come together and share the economic burden required to fund the next stages of vaccines, treatments, testing, medical oxygen and PPE (personal protective equipment) needed to really make the world a safer place. So in this episode we will take a deeper dive into this topic, and I'm fortunate to have Dr Judit Rius Sanjuan, who is an attorney and policy specialist in health technology, innovation and access at the United Nations Development Programme, UNDP. Welcome to the show, Judit.

Judit Rius Sanjuan [00:01:28] Hi Garry. It's an absolute pleasure to talk with you today. I've been following Global Health Matters podcast for a while, and let me start by thanking you and the team for the previous episodes and for doing an episode today on access to medicines and vaccines.

Garry Aslanyan [00:01:42] In this episode, you will also be hearing from two other influential actors in this space who have been playing an important role in achieving equitable access to vaccines and medicines in South Africa. In early January of this year, I spoke to civil society leader Fatima Hassan. She's the founder of the Health Justice Initiative. And more recently, I talked to Dr Petro Terblanche, who is the Managing Director of Afrigen Biologics & Vaccines, host of the new mRNA hub in Cape Town. As we will hear from Fatima and Petro, this has been a contentious and fast evolving area, with exciting developments emerging. But first, before we listen to Fatima and Petro, Judit, can you give our audience an overview of the steps in the medicines and vaccines development process, and also tell us why it may be so difficult to achieve equitable access.

Judit Rius Sanjuan [00:02:39] Yes, absolutely. Let me start by saying that this is a really important issue that affects people all around the world. There are still millions of people that do not have access to the medicines and vaccines that they need. Of course, COVID-19 has been a wake-up call, has really created a spotlight on the inequities for one disease. But I just want to highlight that there's still many of the system priorities that also have huge access to medicines and vaccines challenge. So, on your question about the steps that are needed to develop a vaccine or medicine and ensure it's available at country level - so it's quite long usually, and it includes many stages and stakeholders. I'm going to simplify because the specifics will be different for different products, for different diseases. But one way of explaining is to divide the stages in three main steps. The first one is the discovery of pre-clinical research process, that is basically all the work that needs to happen for a medicinal

vaccine to be developed before it's tested in humans. Most of the time, this work is funded and performed by government, including public research institutions and universities all around the world. The second step starts when the proof of concept has been achieved. If funds and / or prospective market for selling the product are available, then we move to clinical trials. And this is the work that needs to be done in humans to ensure that the technology that the medicine is safe and effective in humans and to obtain regulatory approval. Here, both governments and private sector funds and interventions combine and are important. And the third step is basically when the technology has received regulatory approval, we have proof that it's safe and effective, we then move to the delivery or introduction of a health technology in a specific health system or in a country. Here the majority of funding comes from governments, so both Fatima and Petro will talk about their work in one specific country in South Africa through the three steps of this process. And they will present, I think, two very interesting perspectives, one from a civil society and one from a private sector perspective and how this can be done and how it's being done to accelerate access to COVID-19 technologies.

Garry Aslanyan [00:04:50] Thank you Judit for this overview, very helpful. Let's now listen to Fatima Hassan and hear more about her experience in the fight to achieve equitable access to vaccines in South Africa, as well as the importance of global agreements, such as the trip waiver. Hi Fatma, and welcome to the show.

Fatima Hassan [00:05:15] Thank you for having me on the show. It's such a pleasure to be here today.

Garry Aslanyan [00:05:18] You are a human rights lawyer. Maybe before we get into the topic, maybe you could start by sharing with us your life experience and what awakened your passion for this field.

Fatima Hassan [00:05:31] So it's quite a simple story, actually. You know, I grew up under apartheid, and so the idea was to study law to be able to contribute towards a social justice agenda and, over time, to make sure that the apartheid system would be overthrown. Fortunately, I graduated in the year in which we had our first democratic elections, so I became a new human rights lawyer at the same time that my country was going through a democratic transition. The way in which the Health Justice Initiative was formed is really it draws on all of those experiences, from before. I actually started the Health Justice Initiative in the middle of this particular COVID pandemic, and my first job was to take a position at the AIDS Law Project, where I worked as a young lawyer. And that was my first encounter and experience with the movement of people living with HIV Aids, both in South Africa and globally. And the rest, as they say, is history.

Garry Aslanyan [00:06:31] In the early days of the pandemic, there was a stronger sense of unity and solidarity among countries. It seems that now, many months later, rifts and divisions are out there between north and south. As a South African, how have you experienced this division in the recent months?

Fatima Hassan [00:06:50] So I think that the rifts have always been there, or the division between the rich north and the poor global south. You know, we've seen that play out in many epidemics and we've seen that play out in this pandemic too. I think what we expected was solidarity and indeed there were lots of leaders and institutions saying that there would be solidarity and making a lot of promises, which we believe have been empty promises. The way it has played out in my own country is that for the better part of 2021, while the global north and the richer north had already commenced vaccinating their populations from January 2021, already many of us in the global south had to wait and wait and wait. And so, the way in which that division has played out meant that I only got my first shot of a Pfizer vaccine in July of 2021. Whereas months before my colleagues and friends in North America, parts of Australia, in parts of Europe had already received their first vaccine. This is what we mean when we talk about vaccine apartheid and vaccine nationalism that has played out in the last 18 months.

Garry Aslanyan [00:08:01] So to overcome what you're calling vaccine apartheid and vaccine nationalism, what changes are the Health Justice Initiative campaigning for? What are you looking to see?

Fatima Hassan [00:08:14] So the first thing that we've done is obviously aligned with the global movement of medicine access activists who have been calling for three things. One is the trips waiver, which our Government, with the Government of India, have been proposing since October 2020, which would result in the temporary relaxation of intellectual property rules for the duration of this pandemic. And unfortunately, instead of, like we've discussed earlier, seeing the solidarity that one would expect in a pandemic, that waiver proposal has been vehemently opposed. There's been so much lobbying by the private sector and the private pharmaceutical industry to actually block it, even though 100 Member States now support it, and there are 67 co-sponsors. The second set of demands has been that in order to respond to a pandemic where you can get timely access to test kits, to vaccines, to therapeutics, to every part of the globe at the same time, not where you have to wait a year later or two years later or three years later, you need to bring in more manufacturing partners. And the way you bring in more manufacturing partners is by sharing the technology and transferring the knowledge. So without sharing that knowledge and the technology transfer, you end up holding onto intellectual property rights and basically not relaxing those intellectual property claims. It has been impossible for other manufacturers to come into the system to be able to ramp up supplies. So at the heart of this pandemic has been two things: vaccine nationalism, which has manifested also with vaccine hoarding, the over-ordering of supplies by the richer nations who are already administering third shots and fourth shots in some parts of the world as well. And what it resulted in was, alongside that hoarding and that vaccine nationalism and the me first kind of attitude, was a refusal to share knowledge, knowledge that was publicly funded, knowledge that benefited from public investment and public trials and public participation. So ordinary people like me and you actually contributed to the scientific knowledge, funded this research, but the knowledge has not been shared broadly or in an accelerated manner to actually get the entire world out of this pandemic. We did not vaccinate the whole world at the same time together and in a timely manner.

Garry Aslanyan [00:10:44] So basically, again, the inequity in access to affordable medicines and, of course, vaccines is not a very new experience, and it's been really demonstrated again in the time of pandemic. I know you worked on HIV/AIDS-related similar activities with your AIDS law project and treatment campaign for action to increase treatment, were there any lessons from the HIV experience that they hold true for pandemic and/or you were able to use in this time, in your efforts?

Fatima Hassan [00:11:21] Definitely. So, the work we did as treatment activists at the AIDS Law Project and with the Treatment Action Campaign and with multiple groups around the world at that time, including (?)Act Health Gap, I met a number of groups around the world that have actually worked on the issue of access to HIV/AIDS medicines or what we call antiretrovirals, including groups in India, in Thailand, in Brazil, was that many of us banded together again in this pandemic because we were worried that what we had experienced in the HIV/AIDS epidemic would be repeated here. And that is the exclusion of certain populations and certain geographies from being able to access lifesaving tools. One of the first things we warned about when the pandemic was declared was to not trust any voluntary action. That voluntary action is not enforceable. In order to be able to vaccinate the entire world, you needed rules, you needed compulsory measures, you needed a relaxation of intellectual property claims, and you needed a system to make sure that there would be equity. So, the greatest lesson was, you've got to keep a check on corporate power, you've got to hold rich nations and their leaders to account, and that is the work that all of us have done on the trips waiver, to identify which are the countries who are being the greatest obstacle in this pandemic. You know history will remember them as being on the wrong side of history because in the middle of a pandemic they blocked meaningful efforts to actually get the world vaccinated. They told us to rely on COVAX. They told us to rely on voluntary action. Well unfortunately, what all of that meant was at the end of 2021, less than 10% of people were actually vaccinated in Africa. Of the 10 billion doses that have been administered, the majority have actually gone to people in high-income countries. So, if you say what are the lessons of the HIV/AIDS pandemic just from a human rights perspective, is that unless communities in the global south and governments in the global south and civil society in the global south actually mobilize and organize to basically alert the world to what is happening, you will basically be neglected.

Garry Aslanyan [00:13:37] Fatima, it is clear that many stakeholders play a role in very different ways of approaching this issue of equitable access when it comes to vaccines and medicines. This was a really good input into this important aspect of access and the role of citizens, and clearly you have a lot of passion for this subject. So Fatima presented such a compelling view on the inequity in access to vaccines in low- and middle-income countries such as South Africa where she is, Judit, what are your reflections on what Fatima shared?

Judit Rius Sanjuan [00:14:17] I'm very inspired by the work of Health Justice Initiative and other civil society in South Africa have been doing during COVID-19. I can say this because of my own experience. I have worked for two very effective civil society organizations. I have enormous respect for civil society work and I have learned that change really cannot happen without their involvement and their expertise. There are many different types of civil society

with different focuses, but I think it's essential to have independent, well-funded civil society to increase access to medicines and innovation.

Garry Aslanyan [00:14:49] Indeed Judit. Civil Society has not only played a very important role during the HIV epidemic, but similarly during the COVID-19 pandemic. In recent weeks, it's been also encouraging to see that progress is being made on gaining a compromise on the trips waiver by the WHO Member States. Fatima was very much campaigning for a forward motion in that area when I spoke to her back in January. I'm sure she will be pleased with this progress. So next, let's listen to Petro Terblanche, who will be sharing her views on the recent launch of the first mRNA hub model in Cape Town. Hi Petro, how are you?

Petro Terblanche [00:15:38] Hi, Garry, I'm very well, thank you. It's great talking to you.

Garry Aslanyan [00:15:42] Petro, this is potentially a game changing time for enhancing equity in access to medicines and vaccines, not only in South Africa but for the whole continent. Maybe you could give a brief explanation for our listeners to what is the mRNA technology transfer hub model and what is it all about?

Petro Terblanche [00:16:02] Garry, thank you. So, in the early days of the pandemic, when there was a rude awakening and realization that there is not sufficient vaccine supply to Africa. There was a major initiative taken by the WHO. The World Health Organization had a strategic discussion supported by the COVAX Initiative, the Medicines Patent Pool and Team Europe to change the situation. And the drive was to create a model which is firstly based on technology platforms which are fast, effective and cost effective, and would also be suitable for pandemic preparedness initiatives. So the design was, let's create a hub, a technology hub that will develop a COVID-19 vaccine for low- and middle-income countries. So, the hub has an immediate objective, which is create the platform, create capacity, transfer the technology, take first vaccine candidate to market. But for sustainability, to now develop a portfolio of new vaccines relevant for the burden of disease in low- and middle-income countries, and put those through the tech transfer hub to the full technology package, transfer that then to the spokes, which are placed in many countries, to ensure that there is a continuous flow of vaccine to be produced in these facilities for sustainability reasons.

Garry Aslanyan [00:17:44] You already mentioned that several partners have been part of it, and clearly the success of the initiative is dependent on these partners and each playing a key role, maybe you could explain how different partners contribute or what their role is.

Petro Terblanche [00:18:02] So one of the critical things and important things about this mRNA hub is the convergence of public and private partnerships. And again, we've seen in health innovation, when you combine public good and you combine private drive and orientation and efficiencies, you have a very good model. So the contributing partner is by far WHO. The WHO vaccine group, a regulatory, quality control, and quality assurance; the Medicines Patent Pool around intellectual property issues and project management, the PATH team around integrated project management, CMC quality regulatory and then also technical experts globally, in the U.S. and in Europe, even as far as Australia, contributing key knowledge to fast-track this development. And if you look at it, this is phenomenal. Within a

period of a year, we will complete not only a facility and regulatory, but will also be ready to take a vaccine into phase one clinical trials. That's a phenomenal project.

Garry Aslanyan [00:19:14] And which are the partners in South Africa? Are there any universities or research institutions in South Africa or in Africa?

Petro Terblanche [00:19:23] Yes. And let me also say on the science part, University of Witwatersrand, and African scientists together, was the breakthrough that we announced recently. So an incredible partnership where you bring scientific excellence together in two very different organizations and a team just focused and delivered. An important partnership in South Africa, of course is the South African Government Department of Science and Innovation, supporting us in many aspects.

Garry Aslanyan [00:19:53] So really, the mRNA hub is a move from basically responding to an emergency such as the pandemic to sort of creating longer term capacity and preparedness and also respond to other diseases. So what other diseases or what other health issues do you think it could help?

Petro Terblanche [00:20:16] So Garry, your point that this is more than just making a vaccine, this is about creating capacity and capabilities for socio-economic development. We have indicated that we need to improve on the current first-generation vaccine that we are taking through development and the improvements will be around cost of goods and looking at different RNA loads through using different enzymes and different purification methods, and most important, to use different formulations to try and develop a thermo-stable vaccine. Minus 20 degrees cold chain is very difficult to ensure access and affordability for low- and middle-income countries. So that is a high priority second generation vaccine that we are working on with partners. But beyond that, we have to make a decision on which diseases we will be focused on. I also want to make the point that the mRNA platform is not the be all and end all for vaccine manufacturing, there is still a place for conventional platforms and there will always be. But mRNA lends itself to being flexible and very fast response and because it's a true platform, if you change the sequence, you could basically use the same processes to make a new vaccine. So we have now looked at which diseases would be suitable, which vaccine candidate would be suitable for an mRNA platform. Are they a priority for low- and middle-income countries? And what are the typical hurdles to success? So we're building a portfolio of short-, medium- and long-term priorities. For example, some of the short-term priorities we look at might be Lassa fever or Zika, which would be suitable for the mRNA platform but also neglected diseases in low- and middle-income countries. Interesting put on the table was measles and mumps, which are high burden vaccines or high demand vaccines, and for which there is a room to improve existing vaccines. And then, of course, HIV and TB and malaria is of great importance for Africa. But those are the more difficult ones, and they will probably form part of a longer-term strategy.

Garry Aslanyan [00:22:42] Right, right. Great to hear that there is a process in prioritizing this, especially for low- and middle-income countries. As you already have alluded to the contextual issues that hinder access to medicines or vaccines in low- and middle-income countries, are there any other issues that are hard to predict but you are thinking about to

think of the context, because obviously the thermal adaptability or availability of vaccines that are hard to be distributed in this kind of setting as we already know. But any thoughts of other context kind of issues?

Petro Terblanche [00:23:16] Yes, we are actively seeking partners for some of these vaccine development projects. And then in the bigger scheme of ensuring sustainability, this market shaping and procurement reforms that will be required in low- and middle-income countries. We already opened up the debates and participated in debates looking at procurement systems, looking at preferential procurement for localization, looking at a premium for local production and often of all start frowning upon low- and middle-income countries, talking about premiums for localization. But the world was built on premiums in high-income countries, and we are driving a discussion now which says, look at the socio-economic impact of these initiatives and then run your balance sheet. The contribution to GDP, job creation, quality job creation, innovation and security of supply. If you do a cost benefit analysis, there is no question that a minor premium on localization is justified and will bring a benefit above that 15 or 20 percent premium. So those are complex discussions that happen at a global level. And then, of course, there's intellectual property. I think this is a very heated debate. Our innovation initiatives now are around thermo stability, lower payload, lower cost of goods. Of course, access. And access includes also intellectual property, freedom to operate. And those are discussions that also happen at global level.

Garry Aslanyan [00:25:03] How can the capacity in low- and middle-income countries be boosted through this, so make them more self-sustaining and have the local capacity and in a way change the power dynamics between the north and the south? What are your thoughts on that?

Petro Terblanche [00:25:21] Yeah. So the capacity is two levels - people. This initiative, through the training programmes that are now being funded by many governments, and also the WHO hub has just been announced to train people in biopharmaceutical manufacturing at all levels, from absolute basics to very high-level bioengineering skills. That is going to make a profound difference in the skills base in low- and middle-income countries that can be taken into an industry like that. Without the skills we just don't have an industry. The other part of capacity is the model we are driving is a model which is a distributed model. It's a model of 12 or 14 smaller meeting economies of scale banking completely facilities customized for low- and middle-income countries without compromising quality and regulatory, but can operate on 20 million vials or 10 million vials, 60 million doses in a regional context and supply to needs in those different regions. You can imagine, this is a mega project. Imagine 12, 15 high quality, fully stringent regulatory approved facilities in low- and middle-income countries, mRNA platform, producing 22 different vaccines of importance to the burden of disease in these countries. It will change the vaccine manufacturing landscape globally forever. And what we have now, we are bringing together the science, the existing competence and capabilities in countries like Indonesia, Bangladesh, Viet Nam, Malaysia, South Africa, Senegal, Argentina, Brazil. We've been amazed. In the last two months, when we start engaging with these folks that have been appointed, of the capacity existing and capability and knowledge base already there. We believe that the addition of an mRNA platform with the benefits that it brings is going to make a profound difference.

Garry Aslanyan [00:27:44] Petro, you're very passionate about this. Clearly it's a major milestone for you. Maybe you could share with our listeners how you got to this stage of your career and what keeps you going and being so goal determined.

Petro Terblanche [00:27:58] I've a new sense of purpose. I can't just work because it's work. I have to have something that I feel would challenge all my abilities. I really like complex projects. I like complex projects that is a challenge, but it has to have a purpose which is more than just earning a salary. That is very, very important for me. And my whole career I was looking for what are those challenges, what are those projects that will take everything I have and the team that we built to achieve. In all my career, my biggest joy and my biggest strength is people. My ability to work with people, to build teams, to motivate and to create a vision that people are prepared to work for and contribute to. This project really has brought most of my lifetime experience together and it's challenging it. It's around intellectual property, politics, advocacy, technology, product development, innovation, influence, partnerships, business models, paradigms. It all comes together in this project and I'm really, really enjoying it. It's a great project.

Garry Aslanyan [00:29:12] Thanks, Petro, for this insightful conversation, and I wish you the best of luck. Judit, I just wanted to hear what you thought of this discussion, and I made a comment that it's really a game changing development. What are your thoughts on that?

Judit Rius Sanjuan [00:29:30] Yeah. I mean, we're late. You know, there's been unnecessary death and suffering for the last two years. So I want to acknowledge that by saying yes, it's important. I am encouraged and I am positively optimistic, but I think much more is needed. I think our thinking on access strategies really needs to change. For many years, equity and access has been a priority, mostly at the last stage, not when the technology has already been developed and is ready to receive or has already received regulatory approval and has already been introduced in many countries, especially in Europe and in the United States. Then we have the afterthought, how are we going to ensure access in developing countries? This needs to change, and I hope it's changing because lack of equity and access cannot be a reaction. It has to be prevented from the beginning of the innovation process and we have to create mechanisms and strategies so access and delivery and public health needs are at the core of all the innovation systems, and we are thinking about how we will ensure equity earlier in the research and development process, and how do we ensure there are stakeholders, funders, public and private sector, as well as, of course, civil society are part of the solution.

Garry Aslanyan [00:30:48] This is such an excellent case study, and I feel I've learned three things. First, that it's possible to think about access in the design phase of medicines and vaccines. And second, that by considering access right from the beginning, it helps to create more context appropriate outputs that can be scaled up faster. And third, by strengthening scientific capacity, African countries will be more prepared to respond without delay, if there was ever the next pandemic or emergency, which we know will be.

Petro Terblanche [00:31:24] I agree. I think the focus that both speakers presented on really putting the needs of the patient and the needs of the health system, the national health system, at the centre of their efforts is essential. I think the aspects that you mentioned on

capacity building, on really ensuring that all the different interventions that are needed for access from regulatory to procurement to financing to training, that they are all incorporated is essential. Both speakers also talked about intellectual property and the importance of ensuring not only capacity building in the manufacturing and distribution of these vaccines, but also ensuring access to the knowledge and the scientific discovery process.

Garry Aslanyan [00:32:03] Judit, would you be able to share your top takeaway messages from all we heard and discussed today?

Judit Rius Sanjuan [00:32:10] Encouraging messages in current times are difficult, but let me try, Garry. The first one is that change is possible, that we have many lessons learned from the past, including from HIV/AIDS, but also from many other strategies that have succeeded at increasing access to medicines, and they are succeeding in ensuring more equity than the one we're currently seeing with COVID-19. We need to learn from history and apply these lessons. The second is that there is a recognition, and I think the framing of the UN Secretary General that COVID-19 vaccines are global public goods will be helpful in really ensuring that we need an increased level of ambition on the strategies and the changes that are needed for increasing access to these technologies for COVID-19. And I keep arguing and I keep saying that today and for many other health priorities, including, of course, cancer and diabetes and many other health needs that are currently seeing huge levels of inequity on access to medicines. And the third message is the message is that we have focused a lot today in South Africa and leadership shown by two partners in South Africa, one civil society and one private sector. The leadership of these organizations and these individuals really, on striking for change and for proposing strategies that change the status quo. But I want to highlight that access to medicines is not only a challenge for developing countries, there are many people now living in so-called developed countries, including in the United States and in Europe, that can't afford medicines they need. And there are also, of course, important innovation gaps like new antibiotics that are being neglected in the research and development process. So it's a call for joining efforts and looking for global solutions and strategies that address the needs of people and health systems, no matter where they live and leave nobody behind. Because I think that the episode today has provided examples on how change is possible in one country, and this can be replicated and can be extended to many other health systems and diseases. It's just at our fingertips to be able to achieve that if there's political will and resources available.

Garry Aslanyan [00:34:25] Thank you, Judit, for sharing your knowledge and vast understanding of this area and the work done by UNDP and many other partners to really make access part of the design of research and other parts of the lifecycle of development of affordable medicines, vaccines and diagnostics. So thanks for this.

Judit Rius Sanjuan [00:34:51] Thank you, Garry. It's absolutely a pleasure talking to you.

Garry Aslanyan [00:34:56] So before we close today, I want to share some feedback we've received from you, our listeners.

Ana Hernandez [00:35:07] Many thanks for this condensed wealth of knowledge, experience and inspiration. It is difficult indeed to pick one episode only as all of them are interconnected and nurture each other. Please tell us more about social innovation and how it is driving system transformation.

Garry Aslanyan [00:35:26] We thank Ana Hernandez for listening to the Global Health Matters podcast and for her suggestion. Our team looks forward to bringing you more inspiring episodes in season two. Next month, we'll be bringing you the perspectives of three global health leaders on strategies for disease elimination, eradication and control, so be sure to join us then.

Elisabetta Dessi [00:35:54] Global Health Matters is produced by TDR, an infectious diseases research programme based at the World Health Organization. Gary Aslanyan, Lindi Van Niekerk and Maki Kitamura are the content producers. Obadiah George is the Technical Producer. This podcast was also made possible with the support of Chris Coze, Elisabetta Dessi, Iza Suder-Dayao, Noreen O'Gallagher and Chembe Collaborative. The goal of Global Health Matters is to provide a forum for sharing perspectives on key issues affecting global health research. Send us your comments and suggestions by email or voice message to TDRpod@who.int, and be sure to download and Subscribe wherever you get your podcasts. Thank you for listening.