

Maggie Fox 00:00

Hello and welcome to One World, One Health with the latest ideas to improve the health of our planet and its people. I'm Maggie Fox. All of us here on planet Earth are facing problems, such as pollution, climate change, and infectious diseases (both old and new). All of these problems are connected. This podcast is brought to you by the One Health Trust with bite-sized insights into ways to help.

During the first months of the COVID pandemic, the Shawi people living in Peru's Amazon closed their borders and retreated to the forest. So did some people in Tamil Nadu in India. It worked. They survived better and were able to turn to traditional foods to help make it through the isolation. In this episode, we're chatting with Dr. Carol Zavaleta of Cayetano Heredia University in Lima, Peru. She studies how indigenous communities around the world cope with challenges, especially to their health. Carol, thank you so much for joining us.

Carol Zavaleta-Cortijo 00:57

Hi, Maggie! Now it is really a pleasure and an honor to have this space to talk with you. Thank you for the invitation.

Maggie Fox 01:04

Well, you're studying how indigenous people around the world use some of their traditions to survive disasters--from drought to the COVID pandemic. And you're speaking to us from Peru for this podcast episode. So, why don't we start there? When COVID started spreading, how did some of the people who live in the Amazon protect themselves?

Carol Zavaleta-Cortijo 01:27

So, when we had this pandemic, they organized themselves. So, they have this ----- customary government system where they have ----- and they have these meetings, these (assembly) community assemblies where they decide that they are going to close their lands. So, maybe you are wondering how you can close the Amazon because the Amazon is super spread and super open, right? (So) But they have particular roads, (some) particular trails, and paths that they know, and they put signals and also write letters that say that it is forbidden to go in this community. And they also put some (like a) plants that have a very bad smell.

So, they put it on the entrance or something that they prefer the community to be like, nobody can be here. And they stay in their community, but they go to the forest. So, they don't stay in the ----- community. So, they went to the forest. And they separate themselves. So, they isolate between communities, even if we didn't teach them (that).

So, as a public health people, we say we need to do all this social distance and all the things (right?). So, they did it by just naturally learning that they knew from past pandemics. So, they have a knowledge system that they have learned over multiple pandemics and they translate or transmit the information orally to these new generations.

Maggie Fox 02:48

Okay, this is an important point that you just made. They have this knowledge from previous pandemics because one of the things we know about the European conquest of the Americas is they brought a lot of diseases with them and most of the populations were wiped out by these diseases. Tell us about how these pockets of indigenous peoples learned to survive these pandemics?

Carol Zavaleta-Cortijo 03:12

Yes, Maggie. This is very important (right!) to connect our story in Peru in Latin America with colonization. And I think this is important because we knew there's literature (on) how many indigenous societies have collapsed, but those who didn't collapse (they) have learned and specific examples, for example, the people that we have been working over these two, three years, they remember cholera, for example.

So, they remember when they were children and how cholera killed some of them. They also remember smallpox. So, they remember how they were affected. And what they used (to do) was to go to the forest to separate themselves to (remain) social isolated. So, this knowledge stay in their minds. They also, for example, these days, they are facing malaria, they are facing dengue, all these special diseases that we have. Unfortunately, there is no solutions for that. But for the pandemic (and) for those (diseases) who were like a global threat, they have this knowledge.

Maggie Fox 04:08

Did it work? Did hiding out, so to speak, during the first months of the COVID pandemic protect people?

Carol Zavaleta-Cortijo 04:15

Yes, yes, definitely. And I knew, for example, that at least (for) four months, they were isolated (and) they went to the forest. (But) what happened is that when you go to the forest, you can collect the natural food. But they also started to grow their own food. So, they plant cassava, they plant plantains, fruits (etc.). Mostly, they have different varieties of potatoes. So, people usually think of potatoes ----- the highlands, but also in the Amazon, there are tubers, multiple tubers, and they plant all these but they take time--four months, six months--to grow.

And, also at the same time, they weren't thinking about their domestic animals because they grow their small animals like free range chickens (and things). So, they return to their community at some point and in the community, finally some (people) got the infection. So, they got the symptoms, but those didn't last forever. So, the forests allowed the protection for some months.

And ideally for the future, for example, we can get those months to do something, right. So we can at least give us a window of opportunity to prepare our systems, our health systems to support our brothers and sisters (in these indigenous communities).

Maggie Fox 05:29

And this turning to kind of more traditional foods that can be raised in the forest (is this something that) will give them resilience against other disasters going forward?

Carol Zavaleta-Cortijo 05:39

Yes, I think it is. Our global agrifood systems rely on very few crops, right. But they have all these varieties. And they can substitute. They can use it seasonal so (that) they don't use it at the same time. And so, they can access different types of foods over the year. The only thing is that we need to (also) follow indigenous values. So, this system is not just production, this system also is connected with value--how they see the land, how they see the food. And I have learned this ----- from the Shawi (that) when you harvest cassava, you plant another cassava.

So, you don't easily just get one and just forget about that. They are constantly thinking about this concept that we call sustainability. So, what they actually think is that, for example, if you go to the forest and catch an animal or something in the forest, or fish, they don't simply ----- (use it for) food. So, they when they have more food that they can consume, they share it. We can measure, for example, food waste, we can find solutions, and all these systems are indigenous values about the relationship with food.

Maggie Fox 06:48

And what about traditional medicines as well. You've done a lot of research on that. Now to the Western eye, this can sound a little woowoo (that), you know, there's a plant that has medicinal qualities. But you're a physician as well as a scientist. Tell us what you've learned about these traditional medicines.

Carol Zavaleta-Cortijo 07:06

Thank you, Maggie. Thank you because this is a very important question for me. When I went the first time to the Amazon, I went as a physician. I went to start my clinical practice. And my first patients were people living with HIV, and they were indigenous people. And then I tried to observe them. And they didn't want to actually visit my health facility where I was a physician, and I was wondering why because I felt I was a good physician (I care). So, I was wondering why they didn't come to look for my services. So, I went to talk with them. And actually, I discovered that they have a (completely) different medical system. So, they didn't need me at that point. So, they said why (right!).

So, at some point, I understood that I need to provide something different for them if I want (to) really serve them in a good way. So, at that point is when I turn and change in some way my discipline and turn to do like a more social environmental scientist. And in (this) COVID, for example, we observe that they use herbs, different herbs, not only in Peru. In Peru, the Shawi, the Ashaninka, the Shipibo in my country, but also ----- in Uganda, and (also) in India.

So, they are using herbs, they are using the traditional knowledge. And what happened is that yeah, we want to use clinical trials, we want to use these scientific methods to prove the value of these indigenous knowledge. But I don't think that we are at that point where we can really prove with scientific methods that what is happening there. Because in Bolivia, for example,

where I believe the Minister of Health has created a book, an official book, where they have more than fifty different plants and herbs (catalogue) for different symptoms for COVID. So, they, based on symptoms in some way, solve the health situations.

And, I think that we should be more humbled to understand how the knowledge of indigenous science works before we want to say we want to validate. Obviously, Western science has a different approach and I recognize that because in the COVID, we saw these cases where it gets very worse. This patient, she got, for example, kidney failure, and that was important because she didn't want to continue to use indigenous medicine and we went to convince her that she needs more help.

So, at the end, she went to the hospital and we went with her because the other thing is that the (people in the) health facility don't speak the indigenous language. And, also the cultural awareness is not necessarily in the health facility. So we work on navigating all these situations. And finally, my patient, she got that kidney transplant, and I think it was a huge achievement from the medicine (and) from the science. And I recognize that. I think both medical systems have a place for these emergencies.

Maggie Fox 09:57

So it's not one or the other. It's how both can work together.

Carol Zavaleta-Cortijo 10:01

Right, Maggie. The good thing is that we are living in this world so we have these opportunities.

Maggie Fox 10:06

You've said that many indigenous people have approaches to life in the land that align with One Health principles. Can you talk about some of these?

Carol Zavaleta-Cortijo 10:14

Yes, Maggie. I think, and also my work before wasn't really One Health. But now, I am learning with them. And they are teaching me that nature is not separate from human heart. When I went to the med school and many people who went to med school, nobody talks about nature when you are studying medicine because you will fix people (and) you will cure (you're a healer) but not necessarily with nature. Most of the things that we are using our technologies, right, we're just stuck with equipment, we just vary in protocol for the diagnostics (all these things).

But what happened with indigenous people is that when we, for example, see that they are using rituals, they are using this colorful music and things, we think that maybe this is only art or maybe this is just for tourism or folklore. But actually no. We need to see that those rituals actually are the connections between them and nature. So, this is how they communicate with nature and how they are providing and giving their respect to nature -----.

For example, in Bolivia, (there) is a month of the Pachamama, where indigenous communities and actually the country attends to the Pachamama (the Mother Earth). And in June, (there) is a month (when the people) provide their respects to the Inti who is the Sun God.

So, all these connections imply that animals, plants, minerals, air, weather, everything that you have in nature will give you health. I think that's very important because you acknowledge the health of humans, while you are also acknowledging the surroundings and natural resources around you.

Maggie Fox 11:56

So, how can people in developed countries learn from these people who have stayed closer to their indigenous practices?

Carol Zavaleta-Cortijo 12:03

I think the first thing is to recognize and (to) not assume that there's only one way of life. And there's not only one way of best life and not anyone need to aspire to only one way of life or one way of medicine. I think it's important to remember that each society has created great technology. My society, indigenous people, countries in South America, in other regions have also created technology and science. But we think our technology is less recognized, less investigated, (and) less disseminated.

And I think developed countries need to remember that colonization (has) also changed our lives, and also implies that there are many information that has been lost or stolen. And I think at this moment, we have the indigenous people, for example, inhabit 20% of our planet, but we have 80% of biodiversity in their lands. So, something is happening in those territories that we don't know (about). I think it's important to keep our minds reflective, open, and try to build together this new era that climate change has opened our eyes to work in an intersectional way, but also in an interconnected way with knowledges.

Our world is not the same after the pandemic, especially because we have learned how fragile our health system is. And I think we need to be prepared for future pandemics and use the learning that we have collected. And also, we need to use all our resources, all the resources that we have, to create a better health system and a better world for everyone, not only for humans, but also for plants and for these historically neglected populations ----- .

Maggie Fox 13:51

Carol, thank you so much for joining us.

Carol Zavaleta-Cortijo 13:54

Maggie, this is (a) great conversation. Thank you for making me think on these things. They are very important. Thank you.

Maggie Fox 14:01

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