Module 4: Interview with Dame Sally Davies

[00:00:10] **Maryn McKenna** Hello, and welcome back to the video segments for our MOOC, Covering the COVID Vaccines: What Journalists Need to Know. I'm Maryn McKenna, I'm your chief instructor. You know that by now. And with me today is Dame Sally Davies, who is the master of Trinity College - Cambridge, the former chief medical officer of the United Kingdom and the creator and chair of a new nonprofit, The Trinity Challenge. Dame Sally, thank you for joining us.

[00:00:43] **Dames Sally Davies** It's a pleasure.

[00:00:44] **Maryn McKenna** So, let's start with tell us about the Trinity challenge and what its significance is for the moment we find ourselves in now of, maybe concluding this pandemic, but looking toward the possibility of there being others.

[00:00:59] **Dames Sally Davies** Thank you. Well, in the beginning of the pandemic, as we watched it unfold, we realized that in order to protect populations and support people, we needed to move fast and we needed to be able to act on evidence. But where was that evidence? Well, some is available to governments, to public health authorities, but a lot of evidence is not held in those databases.

[00:01:26] **Dames Sally Davies** And by those people, it's behavioral. It's, are people going out? Where are they going to? How do they move and interact with each other? Where are they spending their money and how much on what and how? And we realize that the behavioral data, the economic data, and so much more, was in the private sector. So what we've built is a collaboration together of over 40 private sector groups and lots of top academic institutions to work together on this.

[00:02:00] **Dames Sally Davies** In fact, I jokingly call it the collision of data science with public health to be better prepared for pandemics in the future and to deliver better responses to this one. And we're working through a public challenge that's live at the moment. So far, we've got more than 250 applications from people, partners who think they've got an idea that could be scaled up to be a global good that will work in low and middle income countries to really either pick up a pandemic on its way or handle a pandemic better or recover better from a pandemic.

[00:02:42] **Maryn McKenna** So, I definitely want to ask more questions about the about future pandemics that we'll face, but let me give you a couple of questions first about this one. So this online course that these journalists are taking who are watching us preps them to cover the vaccination campaign as it rolls out around the world. Do you have any comments about how you think the vaccination is going thus far?

[00:03:05] **Dames Sally Davies** Well, we're all thrilled that the scientists working with the private sector have been able to make vaccines that work and can be delivered within a year, but we clearly need to vaccinate the whole world. Vaccine nationalism and vaccines only in the rich world are not the answer.

[00:03:28] **Dames Sally Davies** Meanwhile, what we can see rising up as well is vaccine hesitancy, and we've got to counter that. And we've got to think, how are we going to make available at an affordable price? And I'm proud that the British have invested in COVAX in a big way, vaccines that work. But will they work forever? When will we get strains of breakthroughs? It's a complex situation, but we will not be safe until the world is safe.

[00:03:59] **Maryn McKenna** It's really striking to me that your last big project, before -when you were chief medical officer of the United Kingdom, involved trying to get the world to pay more attention to the threat of antimicrobial resistance and dealing with how we don't have adequate structures and we don't have an adequate amount of drugs.

[00:04:21] **Maryn McKenna** Now we're looking at a situation where we may have the response to COVID with vaccines, but there may be a breakthrough there as well. The vaccines may not work forever. Do you have any thoughts about how we approached AMR? Is COVID sort of an equivalent situation? Is there anything you learned in in dealing with the AMR problem that helps you think about this one?

[00:04:49] **Dames Sally Davies** Well, I talk about pandemics as, there's the acute one, which is COVID. It's like a lobster dropped into boiling water, making a lot of noise as it dies, so sad. And then, antimicrobial resistance, which is the slow, plodding pandemic going up and up. But like a lobster put into cold water, it's making no noise because it doesn't notice it's dying.

[00:05:14] **Dames Sally Davies** But, you know, to approach both of them, we need data. We need infection prevention and control. We need vaccines. We need effective treatments. We need good diagnostics. It is the same approach. And so I'm thrilled that we've seen such a gallop of science and opportunities with COVID.

[00:05:35] **Dames Sally Davies** I hope we can translate those for the bacterial infections, the other viral infections, and bring our learning and scientific speed and pull through over to those fields. Because surely, if we've already got 700,000 dying every year from drug resistant infections, we ought to be taking it as seriously as COVID.

[00:05:58] **Maryn McKenna** Is there anything that we could have foreseen or anything that we could have put in place in advance that would have made, specifically, these vaccination campaigns go more smoothly?

[00:06:09] **Dames Sally Davies** Yes, I think so, and I see it going wrong as we talk. I mean, we have to put in place a lot of work around why take vaccines? So for a start, you would never find me saying a vaccine is totally safe. No medical intervention is totally safe. What we're looking for is a very rare side event where you are extraordinarily unlucky, either because of your circumstances, but more generally your genetic makeup. And it's a real fluke, very unusual.

[00:06:45] **Dames Sally Davies** And then on a population basis, when you consider how serious the disease is, whether it's measles or COVID, it is worth doing that program in order to show people that it's safe. Predominantly to take vaccines, we've got to be, first of all, honest that there are occasional side effects. Explain what people are preventing for themselves and their populations.

[00:07:15] **Dames Sally Davies** I mean, in my country, the UK, looking after grandmas and grandpas is a very powerful one. But then also, engender trust by explaining about the testing that's being gone through, how we know vaccines are as safe as they are and it's effective. So I spent a lot of time explaining to people the one reason Britain was able to license vaccines very quickly was we had a lot of expertize that was used across Europe before in regulating vaccines.

[00:07:48] **Dames Sally Davies** And not only did we have that expertize, but instead of doing the stages of regulation in sequence, they ran them all in parallel and joined it up every evening, "what we've got to this place," And any bit of it going wrong would have jettisoned the drug or demanded more of that vaccine or demanded more tests. But they have come through.

[00:08:12] **Dames Sally Davies** But there are reasons they could do it so fast, and instead of saying, "They haven't done a proper job!" As one famous American suggested, no! Unpick how they could do it in such a fast schedule and see it is still trustworthy. We also have to think about how social media plays in and how can we get in early with the right stories and the truth. And it isn't always scientific facts that win the day. I know from my colleagues at the NGO Internews that people will listen to trusted members of their community.

[00:08:51] **Dames Sally Davies** So how do we work now and in the future with trusted members of the community in their languages to help them get the right messages so they can feed them out? And I know when I was chief medical officer, we would meet with the heads of the different community and religious groups in Britain to talk about our vaccine programs. So they were well informed so they could assist us in how we shape the message and they could put out their own messages as well.

[00:09:26] **Maryn McKenna** We're still stuck in this pandemic, but as you say, in setting up The Trinity Challenge, we have to think about what other pandemics are going to be coming down the road because inevitably there will be others. Are there things that you're concerned that -- lessons that we haven't learned or that we are not likely to learn, are there things we should have extracted from this experience that it looks like we aren't setting in place yet?

[00:09:51] **Dames Sally Davies** I'd start with data. We know that a lot of data there. How do we, preserving privacy, make sure the data is available at the right time to the right people and usable. And now, through The Trinity Challenge. I've learned that the tech companies do have ways of bringing data together, even if it's very disparate. That's one beautiful technique and as you're aware, they can just slot in, randomly, a few haphazard results.

[00:10:24] **Dames Sally Davies** The outcome is so close, statistically, to the reality, but it's not possible to see and work out what patient is what. Even if you knew their names, you just couldn't find them in it. There are all sorts of ways they can do that. We have to bring that in and make it routine. And we have to build, as one of my colleagues calls it, the muscle memory for working together and being able to do this and think about how, in the public sector, we spend enough but no more money to have more up-to-date digital technologies. I mean, Public Health England is falling over because with too many lines of data for the Excel spreadsheet is not what we expect.

[00:11:12] **Maryn McKenna** So, as you know, the participants in this course are journalists from all around the world who are enmeshed in covering the pandemic as it continues to roll out and the vaccination campaigns. This is your opportunity to make recommendations to them about what you would like to see them writing about or filming about over the next some number of months. Do you have advice for our participants about what they should be looking for as this continues to roll out?

[00:11:42] **Dames Sally Davies** What a treat to speak directly through you to the people. Well, vaccines are terribly important, but they aren't a panacea. They're not the only answer, and different strains will mean that we will need new vaccines. We expect that COVID is here forever.

[00:12:03] **Dames Sally Davies** What we need to do is work our way through it while it attenuates, becomes less severe and we develop a form of herd immunity so that we live with it as we live with flu, giving our elderly and our vulnerable routine vaccinations, perhaps annually for the strains we know are likely to come.

[00:12:25] **Dames Sally Davies** But those vaccines are not the panacea. We need better treatments. We need prevention, good infection prevention and controlled mask wearing during when we think the numbers are going up and social distancing.

[00:12:40] **Dames Sally Davies** Don't forget about antimicrobial resistance, respecting antibiotics, antivirals, antimalarials -- using them appropriately. I would call on companies also to make sure that if they are in the food chain, they're looking after antibiotics. If they're in the pharma business, they're making new antibiotics.

[00:13:05] **Maryn McKenna** That was marvelous advice, thank you so much. So thanks to all of you for watching. That is Dame Sally Davies, master of Trinity College and creator of The Trinity Challenge. I'm Maryn McKenna, your chief instructor. And we'll see you online. Stay safe.