Transcript of IMF podcast:

Jay Patel on Pandemic Preparedness

Bruce Edwards:

So, with all the money and health infrastructure available to them, why have some rich countries suffered higher death rates from COVID-19 than many developing countries?

Jay Patel:

We did find that one of the common denominators was the local leadership. In particular, the test, trace, isolate system, which is one of those core epidemiological tools, really had most benefits when it was locally delivered.

Bruce Edwards:

Welcome to this podcast, produced by the International Monetary Fund. In today's program, why local knowledge matters when dealing with a global pandemic.

Jay Patel:

What was quite striking is that high-income countries had the capacity to do that, but sometimes opted not to go through those routes. My name is Jay Patel and I'm a researcher at the Global Health Governance Program at the University of Edinburgh.

Bruce Edwards:

Jay Patel co-authored, along with his colleague, Devi Sridhar, an article on pandemic preparedness in the December edition of Finance & Development Magazine. Journalist Rhoda Metcalfe sat down with Jay Patel to talk about his research.

Rhoda Metcalfe:

So, in your article, you point out that when the COVID-19 pandemic hit, the impact was quite surprising when you looked at how some poorer nations fared compared to many of the wealthiest countries in the world, like the US and the UK. Can you talk about that?

Jay Patel:

Yes. So, the African region was expected, I suppose, to perform relatively poorly, given its low levels of operational readiness, but actually performed much better than expected when we're comparing deaths per million, for example. Countries that experienced a relatively recent infectious disease outbreak; for example, Ebola in West Africa, MERS in North Africa and the

levels of operational readiness, but actually performed much better than expected when we're comparing deaths per million, for example. Countries that experienced a relatively recent infectious disease outbreak; for example, Ebola in West Africa, MERS in North Africa and the Middle East, SARS in Southeast Asia, there seemed to be a more constructive way of managing this pandemic because of the infrastructures that were in place to respond. For instance, Liberia, just in the wake of Ebola, their ministry of health launched a national community health program.

Jay Patel:

They were recruiting, training, deploying about 4,000 community health workers. They linked them up well to their primary care clinics. And the net result was a health system with coverage extending to nearly a million people across rural and remote areas. And that was an infrastructure that they didn't have prior to Ebola. The services were very fragmented, there were lots of parallel programs, there was very little standardization across the country. And Ebola, in many respects, exploited those deficiencies and forced the foundations for a more resilient primary healthcare system to be built.

Rhoda Metcalfe:

So, that was in place when COVID hit.

Jay Patel:

Exactly, yes. And it could be quite quickly leveraged for this emergency. The way they were coordinating their local teams was fantastic. Senegal, for instance, were returning test results in the space of 24 hours at a time when we were nowhere near those timeframes.

Rhoda Metcalfe:

So, Senegal had a very rapid turnaround system and they obviously put a priority on that.

Jay Patel:

Yes, absolutely. And they did have one of only two laboratories in Africa, the Institute Pasteur Division in their capital city. What was really interesting about Senegal is that in February, when they were just one of two countries in Africa that had that capacity, they did spend considerable time sharing those expertise with other countries, training staff. And I think by two months later, many dozens of countries were in a similar position thanks to their knowledge sharing. Also, one thing that we noticed was there seemed to be a trend whereby countries in sort of Southeast Asia and also West Africa took the quarantine and the isolation protocols a lot more seriously.

Jay Patel:

I think they recognized that testing and tracing does a lot of the hard work in terms of identifying where disease is distributed in a population. But ultimately those cases need to be isolated in order to break the transmission chains. So, part of the enabler is support, support packages. It's quite a big ask to make people stay at home for 14 days at very short notice. And what these countries had in common was that any practical support, any financial support, often covering quite high percentages of their salaries for those periods of times, were offered to people just to ensure that the transmission chains were cut off. And that's an area where... And the UK certainly did not embrace as much as they perhaps should have done.

Rhoda Metcalfe:

So, financial incentives to make people more comfortable with the idea of quarantining. Obviously, so they don't feel like they have to go to work.

Jay Patel:

Yes, exactly. And sometimes it's practical support that people need. It's the food delivery. Tailoring it to what people need just helps ensure that people observe the right recommendations.

Rhoda Metcalfe:

Tailoring it to what people need just helps ensure that people observe the right recommendations.

Rhoda Metcalfe:

So, it's interesting, you talk about how some countries threw money at infrastructure and that didn't always turn out to be a good investment. Can you talk about investing in human capital versus investing in infrastructure? You mentioned that, for example, in the UK, a fair bit of money went into building new hospitals. Can you tell me a bit about that?

Jay Patel:

Yeah, that's right. Paul Farmer, the American physician, summarized four key pillars of a well-oiled health system. And he said that they need staff, staffed space, and systems. And that's quite a nice way of distilling their complexity. And you mentioned the Nightingale Hospitals in the UK. Essentially, they were projects to convert spaces into makeshift healthcare facilities. They were intended as a means of rapidly boosting health system capacity, especially for the periods when the National Health Service would be overstretched. What we actually observed was that even when the NHS was nearing collapse, those Nightingale Hospitals, which cost nearly three quarters of a billion dollars, were left largely unused. There was a hyper-focus on acquiring space, procuring stuff like medical equipment, therapeutics, linking to systems, but there were not enough trained staff on hand.

Rhoda Metcalfe:

So, it was the human capital that was missing.

Jay Patel:

That's right, yes. Exactly.

Rhoda Metcalfe:

And you were saying that countries who put more of a focus, particularly on being able to quickly get people into place, increase the number of healthcare workers, has that proven to be the most effective approach?

Jay Patel:

I think that's certainly one of the observations that we've found, and it also applies to high income countries. Japan did pretty well in the early months, especially around contact tracing. Again, training lots of public health nurses to conduct the contact tracing. And they realized that really one of the key weapons, if you like, in disrupting community transmission, was identifying clusters of cases and working backwards to understand where those clusters might have emerged. So, having the on the ground support to coordinate those efforts certainly helped. Whereas in the UK, that was all done by a call center. And ultimately contact tracing is about trust, and it's very hard to ascertain the right information and make contact tracing effective when people are talking to call centers so many miles away without understanding the local context.

Rhoda Metcalfe:

I see. So you're saying that in Japan, that this system, that people work closer to the communities that they were actually trying to contact?

Jay Patel:

Yes. Yes. And they had the benefits of the local awareness and greater trust.

Rhoda Metcalfe:

Right. I guess, because not everyone is willing to admit that they've got illness in the family or that they've been in contact with someone.

Jay Patel:

Exactly, yes. It's a case of dobbing in your friends, really.

Jay Patel:

Exactly, yes. It's a case of dobbing in your friends, really.

Rhoda Metcalfe:

Right, right. That's interesting. So this leads to my next question, which is the question of local versus central leadership. And you say that certain countries had very good local organizations rolling out programs and that this had a big impact. So, what does that look like, the local community-based approach versus sort of a more centralized top-down strategy?

Jay Patel:

Yes. We did find that one of the common denominators was the local leadership. In particular, the test, trace, isolate system, which is one of those core epidemiological tools, really had most benefits when it was locally delivered, especially at the community levels. Essentially, we think the infrastructure for those should be decentralized. And what was quite striking is that high-income countries had the capacity to do that, but sometimes opted not to go through those routes. And the UK was one example of that, and I think maybe political reasons bled into why that was the case.

Rhoda Metcalfe:

So, when you say that, what do you mean? Instead of keeping it all in a central office, they should have put it out to a lot of regional offices? Or I'm just trying to imagine what that looks like.

Jay Patel:

Yes. Well, a good example is testing. And we had, I think, 43 laboratories spread around the UK that were capable of doing the testing. And the obvious approach would be to provide the support to enable that to happen. Our government took a different approach, which was to instead outsource to private companies who would then coordinate the testing, and the result was that it was terribly fragmented. Test results were not then being linked to the tracing, it wasn't then linked to the isolation and the support aspect. So actually, the true benefits of testing weren't realized because of that disconnect.

Rhoda Metcalfe:

So, you also argue in your article that countries need to invest more in what you call health security, and that they shouldn't be looking at this as a cost, but that they should be looking at this more as a kind of insurance against future losses. So, first of all, what do you mean by health security, and why should we be looking at it as an investment, not a cost?

Jay Patel:

Well, it seems as though the public health community engage in an almost annual rite of passage where they're justifying why financing health is an investment and not a cost. You asked about health security. This is subject to debate on the precise definition and what it should cover, but essentially it's about protecting populations from incidents that threaten population health. And that includes infectious disease pathogens, antimicrobial resistance. So, on prevention, I think COVID-19 gives the economic argument, I hope, crystalline clarity, because essentially the task that's presented to us is spending tens of billion dollars could possibly prevent an expenditure of tens of trillion of dollars.

Jay Patel:

The estimated cost of this pandemic is certainly in that region. The high level independent panel for the G20 found that if a pandemic were to occur in only one or two decades from now, the estimated costs to government would still be around 10 to 25 times the cumulative sum of all the additional investments that are needed.

Rhoda Metcalfe:

Rhoda Metcalfe:

Right. So, COVID has been a powerful lesson in terms of how to and how not to deal with a pandemic. What do you believe countries should be investing in to be more health secure and to be better prepared for the next pandemic? Where should the main focus be?

Jay Patel:

Well, I think there are two main areas. One, is there have been calls for the establishment of a global health threats board, and it's loosely modeled on the Financial Stability Board established by the G20 after the London Summit in 2009. So, that was seen as quite successful in the aftermath of the global financial crisis. It looked collectively to contain risks to the global financial system. Really, copying, or mirroring a similar idea for health security would be a good start. It would certainly strengthen, or help strengthen the role of the World Health Organization through enhancing the multi-lateral funding. And it would probably consolidate its place at the center of the pandemic preparedness architecture. And the estimates are that that's doable with only an additional $1 billion a year in assessed contributions.

Jay Patel:

And if spread equitably over a number of countries, that's a seemingly small investment. That would help convene experts who can model all these types of scenarios, identify what's required, and look at interventions for different contexts, different countries and regions. I think the second big area of investment, and this is more substantial, is around research and development. Really, what we need to be thinking about is diagnostic capacities, therapeutic developments, vaccine development, ensuring that regions around the world have the capacity to manufacture vaccines, for instance. The G20 report estimates that that would require $15 billion a year to make that meaningful.

Rhoda Metcalfe:

Right. And one element of this, you're saying, is this idea that not just a few locations, not just a few countries would have this capacity to produce antivirals, et cetera, but that it should be better distributed around the world?

Jay Patel:

Yes. Yes, that's right. And the G7 recently flirted with the idea of a hundred-day mission, where one of the key ambitions is to have vaccines that's ready to be produced at scale in 100 days. And it's a nice aim, it's colored with plenty of optimism. And if we look at where the bottleneck is at the moment with the vaccine supply, it's certainly in manufacturing. And the regions of the world that require vaccines due to low coverage, don't have as many resources to manufacture those. So certainly that, I think that's going to be a big priority in preparing the world for the next outbreak.

Rhoda Metcalfe:

Well, Jay Patel, this has been a really interesting conversation, and I thank you so much for speaking with me today.

Jay Patel:

Thank you for having me.

Bruce Edwards:

That was journalist Rhoda Metcalfe, speaking with Jay Patel, researcher at the Global Health Governance Program at the University of Edinburgh. Patel and his colleague, Devi Sridhar, have an article on pandemic preparedness in the December issue of Finance & Development Magazine. Check it out at imf.org/fandd, or download the Finance & Development app. And look for other IMF podcasts wherever you get your podcasts. Please subscribe if you like what you're hearing. You can also follow us on Twitter at IMF_podcast. I'm Bruce Edwards.

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