

COVID-19

Virtual Press conference

25 January 2021

Speaker key:

FC	Fadela Chaib
TAG	Dr Tedros Adhanom Ghebreyesu
SKO	Professor Sebnem Kalemi-Ozcan
JD	John Denton
AS	Ashley
BA	Dr Bruce Aylward
KOB	Dr Kate O'Brien
NI	Nina
MR	Dr Michael Ryan
DR	Drew
GA	Gabriela
MK	Dr Maria Van Kerkhove
KA	Kai

00:00:19

FC Hello, all. I am Fadela Chaib, speaking to you from WHO headquarters in Geneva and welcoming you to our global COVID-19 press conference today, Monday 25th January. We will welcome two guests who will tell us more about compelling research on the economic benefit of funding efforts to ensure equitable access to COVID-19 vaccines.

Simultaneous interpretation is provided in the six UN languages plus Portuguese and Hindi. Let me introduce to you the WHO participants. Present in the room are the WHO Director-General, Dr Tedros, Dr Mike Ryan, Executive Director, Health Emergencies, Dr Maria Van Kerkhove, Technical Lead on COVID-

19, Dr Bruce Aylward, Special Advisor to the Director-General and lead on the ACT Accelerator.

Joining us remotely are Dr Mariangela Simao, Assistant Director-General, Access to Medicines and Health Products, Dr Soumya Swaminathan, Chief Scientist, and Dr Kate O'Brien, Director, Immunisation, Vaccines and Biologicals. Welcome all. Now without further ado I will hand over to Dr Tedros for his opening remarks and to introduce to you our guests. Over to you, Dr Tedros.

TAG Thank you. Thank you so much, Fadela, shukran and happy birthday to you. Over the past year our staff have been working very hard and no birthday, no New Year, no break so Fadela is one of the examples and again, happy birthday, our sister. Shukran.

00:02:21

FC Thank you.

[Inaudible]

TAG It's a birthday for another colleague of ours, Sophia, who is in the room so happy birthday to both of you, Fadela and Sophia. Good morning, good afternoon and good evening. A year ago today fewer than 1,500 cases of COVID-19 had been reported to WHO including just 20 cases outside China. This week we expect to reach 100 million reported cases.

Numbers can make us numb to what they represent. Every death is someone's parent, someone's partner, someone's child, someone's friend. Our response must be twofold; to mourn those we have lost and to resolve that each one of us will do everything we can to stop transmission and save lives.

00:03:35

Vaccines are giving us hope, which is why every life we lose now is even more tragic. We must take heart, take hope and take action. I have called for vaccination of health workers and older people to be underway in all countries within the first 100 days of the year.

But there is so much we can all do to navigate our way out of this pandemic while we all wait our turn to be vaccinated; physical distancing, avoiding crowds, masks, hand hygiene, ventilation and more.

You might be sick of hearing it; you might be sick of doing it but this virus is not sick of us. Please do your part for yourself and for

others. As I said, numbers can be dehumanising but behind every number is a person, a story.

One of the ways WHO is helping to tell stories about health is through the WHO Health For All film festival. Last year almost 1,300 films were submitted from all over the world, telling heart-warming and inspiring stories about health and health workers.

This year we're inviting entries in three categories matching each of WHO's three strategic priorities; universal health coverage, health emergencies and better health and well-being. More details about the categories and the festival are available on our website.

00:05:46

As a reminder, the deadline for submitting films for this year's festival is this Saturday 30th January so get your films in and I look forward to seeing them.

Last week I said that the world stood on the brink of a catastrophic moral failure if it doesn't deliver equitable access to vaccines. Two new studies show that it wouldn't just be a moral failure; it would be an economic failure. A new report from the International Labour Organisation Analyses the impact of the pandemic on the global labour market. It finds that 8.8% of global working hours were lost last year, resulting in a decline in global labour equivalent to \$3.7 trillion.

The report projects that most countries will recover in the second half of 2021 depending on vaccination roll-out. It recommends international support for low and middle-income countries to support vaccine roll-out and to promote economic and employment recovery.

00:07:12

The second study commissioned by the International Chamber of Commerce Research Foundation makes a strong economic case for vaccine equity. It finds that vaccine nationalism could cost the global economy up to US\$9.2 trillion and almost half of that, \$4.5 trillion, would be incurred in the wealthiest economies.

In contrast the financing gap for the Access to COVID-19 Tools Accelerator is US\$26 billion. If fully funded the ACT Accelerator would return up to \$166 for every dollar invested. Vaccine nationalism might serve short-term political goals but it is in every nation's own medium and long-term economic interests to support vaccine equity.

Until we end the pandemic everywhere we won't end it everywhere. As we speak, rich countries are rolling out vaccines while the world's least developed countries watch and wait. Every day that passes the divide grows larger between the world's haves and have-nots.

Less than an hour ago I spoke to President Ramaphosa of South Africa and on Wednesday I will be speaking with Ministers of Health and Ministers of Finance from the African Union. I will tell them that we're doing everything we can to accelerate the roll-out of vaccines in Africa to save lives and get their economies back on track.

00:09:12

The rest of the world must play its part. The COVID-19 pandemic has reminded all of us that health and economics are closely connected and that we're all in this together. We are family. Today I'm delighted to be joined by the author of this new study, Professor Sebnem Kalemi-Ozcan, Professor of Economics at the University of Maryland. Professor, thank you for this important work and thank you for joining us today. You have the floor.

SKO Thank you very much for having me today. This is an amazing honour and privilege, to be among such distinguished guests, panellists and participants. Let me start by saying that this is a study of a team of five so we are five people; I'm just one of the authors. It is joint work with my co-authors, [names]. All right now reside in Turkey; Cort [?] University. They are professors there.

What we did in this paper actually goes back to our conversations in April 2020 and we really want to understand; a shock of this magnitude; how will that affect emerging markets and the world economy since we are all of Turkish origin?

00:11:00

That's how we started working on this thing because we realised for a small open economy there would be several dimensions of this shock economically coming from external demand, coming from the important intermediate inputs, capital flows, exchange rate so that's how we started working on it. Then later on we did two papers - the latter one is the one we are talking about today - thanks to the support from ICC.

I will get to the point very quickly; what we want to do in this paper is to marry the sectoral heterogeneity in infection

dynamics with the sectoral heterogeneity in global trade and production networks.

We know that there is a sectoral heterogeneity on the infection part; the jobs, occupations, sectors where you need close proximity of people are going to have higher infection rates. Old people are going to be more vulnerable so we already know of this thanks to the work of epidemiologists and the like and also economists; that this is not your standard shock and certain sectors are going to be very much more affected than the other sectors; at the origin of course services sectors relative to manufacturing sectors because services sectors require close proximity.

00:12:26

But there is an economic side to this, a global, international trade and production network that also works through amazingly complex sectoral linkages and that's what we want to do. We want to bring that and then we want to marry these two dimensions of the sectoral heterogeneity in infection dynamics and sectoral heterogeneity in trade and production and that's what we did.

We have an SIR model. We borrowed that from epidemiologists. We bring very rich data from every country. We do this for 65 countries and 35 sectors so we have an R number for every country and then we combined that epidemiological side using real-time data on infection dynamics from WHO, from Johns Hopkins university, combining that with economic data on trade and production networks that comes from OECD on multi-country, multi-sector economic linkages that tells us how each sector in each country imports and exports with other sectors in other countries.

00:13:35

So again we have a total of 65 countries and 35 sectors and then we tried to estimate several scenarios and several different specifications. The numbers just quoted by Dr Tedros are our most extreme scenario, the upper bound estimate if you like, where we assumed there won't be any vaccination at all in emerging markets and developing economies in 2021 while advanced economies are going to be fully vaccinated.

This may be not that realistic so we look at other scenarios in the paper too where there might be some vaccination in emerging markets or developing economies, still more vaccinations in advanced economies.

But the point here is that even if you achieve universal vaccination in advanced economies, meaning your restaurants are open, your life's back to normal, your services sectors are going to work fine, you are going to have a huge hit in your tradable sector.

Then because advanced economies are very large and very connected to global trade and global production networks they are going to not only feel this hit; as Dr Tedros mentioned, in the worst-case scenario they are going to bear half of this global cost even if they manage to vaccinate all their citizens.

00:15:03

This is very important because this is a full-fledged trade and international production network channel. That's what we want to focus on, disconnected from whatever domestic problem you have in your own country.

This is why we work out this case where advanced economies finish the pandemic, they vaccinate everyone; the other countries don't. This is going to highlight the fact that no economy is an island; economies are interconnected through trade and production linkages and when we bring them in as they are we don't also allow any changes to those relationships so you want to estimate this very short-term cost.

Then there will be important economic costs even for the countries who are vaccinated, which would be the advanced economies, which is why we emphasise the economic side of an equitable global vaccine distribution by making sure vaccinations are done also in emerging markets and developing economies so that global economies can recover as a whole.

We're saying no economy can recovery fully until every economy recovers. Thank you very much.

00:16:24

TAG Thank you. Thank you so much, Professor. It's my sincere wish that all governments pay careful attention to this study. The study was commissioned by the Research Foundation of the International Chamber of Commerce, which represents more than 45 million companies in over 100 countries.

Today I'm very pleased to welcome John Denton, the Secretary-General of the International Chamber of Commerce. John, you have the floor.

JD Dr Tedros, thank you very much; great to be with you all. It's an honour to participate in this discussion and it's great to be on the panel particularly with you, Tedros, but also with one of the analysts who worked so hard on this report.

The reason that the ICC is involved is generally driven by our purpose which is to enable business worldwide to secure peace, prosperity and opportunity for all. Just as we identified early on the tragedy of the attack not just on human lives but also on the economic well-being of so many individuals and citizens on a global basis we sought at that time to intervene on this crazy issue around the failure of distribution of PPE and ventilators.

00:17:44

We identified there that one of the great risks was that the failure to engage the private sector early on was simply exacerbating the tensions and problems. We actually predicted at that point in time that unless the private sector was more involved - particularly we saw the issue and the contours start emerging around vaccines and distribution of vaccines - then we're heading towards a problem, a real problem.

But our hypothesis was that governments had failed to understand the interconnectedness and in particular, as the previous speaker just said, the impact of trade in goods and services and the interconnectedness of supply chains and the failure of those to continue to operate effectively until all are vaccinated effectively would actually exacerbate the economic damage to the globe.

But importantly that economic damage would not be visited just upon developing countries but would actually be effectively visited upon developed countries as well. The headline number was \$9 trillion of economic damage which will continue to flow unless the COVID-19 vaccines and therapeutics were distributed equitably.

00:18:50

But the point which we wanted to understand better and which is clearly made here and has just been identified as well was that about half of that actually affects developed countries. If you actually want to fix your own economy you're going to have to get involved in fixing the global economy and part of that is ensuring that vaccines flow globally and equitably.

This is not an act of charity. This is economic common sense. If you want to ensure that the trillions and the hundreds of billions

that you are spending on domestic stimulus is more than ephemeral you need to ensure it's durable. It can only be durable if you also support access to vaccines and vaccinations and therapeutics in the developing world as well, across the globe and equitable access there.

That's because the failure of exports cost jobs; that's because of a failure to understand that a lot of jobs for example in the US are a consequence of intermediation of trade where you get tyres for the auto industry being delivered and developed out of Thailand. Of course if Thailand can't deliver and develop those tyres into the US market which causes a slowdown and impairs the auto industry then there's actually economic loss.

00:20:06

Why can't they do that? Because they're being affected by COVID-19 and they're being restricted in their capacity to actually get their factories moving, get their workers to work, which is actually undermining their effectiveness because they can't get access to vaccines and therapeutics.

It's in your interests; it's in the interests of finance ministers and governments in developed countries to ensure the equitable access and which is really the full funding of the COVAX ACTA facility. Frankly the shortfall at the moment is 28 billion. When you add up all the stimulus packages it's less than 1%, it's a rounding error and this is a very sensible investment.

And we already see the contours globally of a K-shaped recovery and we know that's exacerbating inequality but do we understand until we see this report that we're actually taking those contours and actually making them real and concrete in economies like the US?

00:20:58

It's not Wall Street that's going to be affected here, it's Main Street, it's mums and dads, it's small and medium enterprises, it's workers in service sectors who are actually already hit hard, they're going to be hit even harder again so frankly this report is a wake-up call and we're sick and tired of hearing governments say, as an act of generosity we're giving to the COVAX facility.

Frankly it's an act of economic rationality to do so. It's incredibly important that we actually understand that there's economic independence and there's mutual interest here in getting this right and there are governments who can do more.

We are very happy and we've praised the US Government for stepping up and getting involved again but more needs to be done if they want to ensure that the stimulus package that's working its way through from the White House at the moment and into the US economy is actually effective and durable.

They need to get behind and show leadership with other countries. Japan can frankly do more; Canada can do more; Australia can do more; the constituent members of the European Union must do more as well. Wealth countries; this is not an act of generosity. If you want to ensure a durable recovery in your economies you need to step up and actually pay up help her because the developing world stands ready and willing to distribute the vaccines and vaccinations and therapeutics. They simply need access to them and that's where the ACTA facilitator comes in.

00:22:24

So we welcome the opportunity to participate. The private sector is stepping up, as we have on issues like global mobility where we not only talked about, we developed tools like digital authentication to ensure that we can risk-manage access to global travel again and get economies moving, which is why we created ICC AOK pass.

We do practical stuff, we set policy, we set standards. The private sector is committed to enabling business worldwide to secure peace, prosperity and opportunity for all and this report is an important part of shifting the policy framework to understand that funding COVAX Accelerator A is actually in the mutual interests of all parties, not just developing countries. Developed countries must stand up with the private sector.

TAG Thank you. Thank you, John. Maybe to quote you, this is not charity, it's an economic common sense. Thank you so much indeed and thank you for your partnership and support over the past year. With that, Fadela, back to you and happy birthday again to you and Sophie.

00:23:34

FC Thank you, Dr Tedros. I will now open the floor to questions from journalist. I remind you that you need to use the raise your hand icon in order to get in the queue and please don't forget to unmute yourself. I will start by giving the floor to Politico; Ashley Furlong. Ashley, can you hear me?

AS Thanks, Fadela. Can you hear me?

FC Very well. Go ahead, please.

AS Thank you. My question is about the deal announced on Friday between COVAX and Pfizer BioNTech for 40 million doses of their vaccine. That number seems quite small to me given the size of the other deals that have already been made for this vaccine. We've seen the EU has reserved 600 million doses; the US has 200 million. I want to know if you could explain that discrepancy?

Would you also be able to explain how this limited number of doses will be prioritised across countries participating in the COVAX facility? Thank you.

00:24:41

FC Thank you, Ashley. Just looking, who can answer this... Dr Bruce Aylward will take this question.

BA Thank you very much, Ashley. One of the most important things as the COVAX facility put together its portfolio of vaccines, just as they were put together in for example the European Union and other places was to ensure that you had a diversity of products that you could rely on both today but also in the future.

Part of the deal on Friday was to ensure that the COVAX facility also had access to and experience with mRNA vaccines because the importance that these have played in the initial roll-out in high-income countries in particular but may also play as we go forward and we look at a need to potentially adapt the vaccines as well.

But there're a few things to realise in putting this deal in place even with relatively small doses of vaccines because this is a vaccine that we anticipate - because it's already licensed, already in use, we already have recommendations from the World Health Organization on how to use it globally - that this could be launched very, very rapidly and earlier possibly than some of the other products that are currently available.

00:26:01

Rolling this out even in small quantities has multiple major advantages. Number one, because you'll remember, Ashley, even in the Western countries the Pfizer vaccine was rolled out with very small quantities initially but what that does is it gets the whole system working, it gets your indemnification process in place, your no-fault compensation processes, your cold chain in place, your training in place; all the other things that will be absolutely vital to the products that come before it.

The other thing was even with a relatively small number of doses - and we look at this quite closely - it was clear that we could make a real difference in protecting some of the most highly exposed, highly at risk healthcare workers, particularly in some of the AMC countries that the facility serves.

Then the other important element of it was by having a framework agreement in place with Pfizer for this important vaccine - because remember, of all the countries that are currently vaccinating which are over 50 now more than 45 of those countries are actually using the Pfizer vaccine and after that the next one is much, much fewer, down around seven countries.

00:27:13

So the other big advantage by putting the framework agreement in place is that we can then open the door to donations in a much more potentially seamless manner with other countries that have contracts with and substantial quantities of the Pfizer vaccine.

So there are multiple advantages from the experience we will get, the learning experience, the protection to this vital health worker infrastructure in low-income countries, which is highly exposed obviously; opens the door to donations, etc.

In terms of where it would be used first, back on 6th January the head of the COVAX facility actually wrote out to all of the participating countries, all 190 countries, explained that we would have access, we were negotiating to have access to the Pfizer product and then invited countries that might like to be part of a very early small-scale roll-out as part of, as I said, a learning and reproduction activity.

00:28:22

So we've now received applications from a number of countries that are interested to do that. There's a large readiness assessment ongoing to see who has the infrastructure and requirements in place to be able to use that product.

Then over the coming week or week plus there will be a process then to try and look at what is the best order of countries to roll out the products so that'll take place through what's called the allocation mechanism of the COVAX facility.

So by starting with this product an awful lot of learnings and really make sure the system can move the larger doses of other products that we expect will come in right behind it in February.

FC Thank you. Dr O'Brien, you have the floor.

KOB Yes, just to add to Bruce's really comprehensive reply to that. I think it's also really important to recognise that the deals that the facility is doing right now are based on the projection of the target for 2021 which is two billion doses and so it is that mix of the portfolio for two billion.

But that aspiration, which we have achieved, for two billion is not the end of the COVAX role and the COVAX facility. I think it's becoming very clear that, as many countries are aspiring to do, coverage beyond 20%...

00:29:57

20% was always the target for those most essential groups and the COVAX facility is really the means for global allocation of vaccines beyond 20% and I think that's really the message that is very clear, that this was the minimum and so putting in place a contract with Pfizer to get started with doses especially as the mix of products continues to mature is a means also to expand the number of doses and the proportion coverage through donations and by raising additional funds, through additional volumes. Thank you.

FC Thank you. Now I would like to invite Nina Larson from AFP to ask the next question. Nina, can you hear me?

NI Yes. Thanks, Fadela. Can you hear me?

FC Yes, very well. Go ahead, please.

NI Thank you. Thanks for taking my question. I had a question about the Olympics. The French National Olympic Committee said today that it would be extremely difficult for athletes to participate in the Tokyo Olympics if not vaccinated.

00:31:17

So I was wondering if you think athletes should in any case be prioritised for vaccines to allow the Olympics to go ahead. Thank you.

FC Thank you, Nina. Dr Ryan.

MR Thank you for the question. We obviously wish that everyone could be vaccinated but Bruce and the DG before have clearly laid out and we have over many days and weeks that we face a crisis now on a global scale that requires front-line health workers, those older people and those most vulnerable in our societies, to access vaccine first.

That doesn't in any way negate the desire or the will to have the Olympics and to come together and celebrate a wonderful global sporting event where all countries come together to share that and what a wonderful symbol those games are for our shared humanity.

However we have to face the realities of what we face now. There is not enough vaccine right now to even serve those who are most at risk and it's not about saying it's putting one priority in front of another. We should address all of these issues over time.

00:32:29

Right now we're laser-focused on solving our biggest problem which is vaccinating health workers in all countries and allowing people who are vulnerable to dying from this infection to access vaccine.

We will continue to work with the IOC, we'll continue to work with the host city, we will continue to work with the Ministry of Health, Labour and Welfare as part of their taskforce to offer risk management advice right through the process.

The final decision on the risk management measures for the Olympics and the final decision regarding the Olympics themselves is a decision for the IOC and for the Japanese authorities.

FC Dr Aylward.

BA Thanks, Fadela. Just further to Mike's point, this is not an issue about the Olympics. It's an issue about how we use a scarce resource to try and combat what has been one of the most devastating - obviously - health crises of our time and it has been disproportionately affecting certain parts of our populations.

00:33:35

Our healthcare workers, as Mike said, have been in some places devastated by the numbers that have been infected and seriously ill or even died as a result. But most tragic is what we've seen among our older populations and our populations living in longer-term institutions.

I thought one of the more heart-warming things I saw, Mike, was an interview or a quote from an athlete who was an Olympic athlete who said, there are a lot of people who need to be

vaccinated before I am. Really that's what it all comes down to; making sure that the people who need these products most...

And this is again coming back to what the Director-General said; in every country and every corner and every population of the world there are older people everywhere, there are healthcare workers everywhere. We need to make sure they're protected everywhere and right now we have a real stretch on the available vaccines just to get into those populations and protect them.

FC Thank you. I would like now to invite Drew Henshall from the Wall Street Journal to ask a question. Drew, can you hear me?

00:34:55

DR Yes, I can hear you just fine. Can you hear me now?

FC Yes. Go ahead, please.

DR My question's specifically about Europe, if I can focus on the EU region; just to provide some specificity when we say wealthier markets are recovering in the second half of 2021. Because even with all the resources that the EU has here we're a month into vaccination, France, Germany have barely vaccinated more than 1% of their population and some of that is supply constraints but, as you guys have noted, those constraints remain extremely tight for the foreseeable future.

Then you have 30, 40% of people who in poll after poll refuse to get vaccinated. So I guess when we talk about Europe or the global north recovering how much do we mean that transmission will be at zero? I guess my question is, how would you rate the likelihood that this disease will remain endemic to Europe even at the current rate of vaccination? Thanks.

00:36:04

FC Thank you. We have several questions here. Let's try to address them all.

MR Just to address the issue of endemicity and the issues around vaccines and other things, I think there's always a risk that any disease will become endemic to human populations; in fact that is the history of epidemic diseases in humans. We very often are affected in the first waves of a new infection with high-impact epidemics; they've gone back through history.

Very often the disease - and this is a sad fact - in historical terms very often killed many, many people and then as the disease moved into younger people as older people became immune the only new susceptibles were in younger kids as they were born.

That's why we've seen many diseases become diseases of childhood, because in effect the diseases have moved into those age groups and continued to kill over centuries.

The issue for us in terms of looking at endemicity regarding a disease like COVID is that there are a number of factors that would allow us to believe that such a disease could be eradicated.

00:37:14

However there're a number of factors right now that we face and there are headwinds. One is the absolute presence of the disease in so many countries, the fact that we're not seemingly able to implement comprehensive long-term measures to contain and control the disease.

The availability of vaccines right now is not optimal and in that sense the current availability and for the foreseeable future the coverage of vaccines will not reach a point where it will stop transmission necessarily so we're likely to have continued transmission.

The advantage we have right now based on the targets that the vaccine has in terms of its efficacy is we can significantly and very, very greatly reduce mortality, reduce severe illness, reduce the impact this has on our societies and on our loved ones and on those who are most vulnerable.

In that sense we can return to normal life. Will this disease continue to transmit? Most likely for a long time unless we find the kind of compliance and the kind of vaccine coverage that would be required to achieve that.

00:38:23

If vaccine coverage lags behind, particularly in younger adults, then yes, we will struggle to eradicate this disease but remember, we've only ever eradicated one disease on this planet, smallpox, and we're struggling against polio and we're struggling to eliminate measles.

So the availability of a vaccine, the availability go the will to eradicate or eliminate does not guarantee success so I don't believe we should start setting elimination or eradication of this virus as the bar for success. That is not the bar for success. The bar for success is reducing the capacity of this virus to kill, to put people in hospital, to destroy our economic and social lives.

We have to reach a point where we're in control of the virus, the virus is not in control of us and that we have countermeasures in place that keep the capacity of this virus to cause harm to a minimum level and we are back in control.

I would look at that as success. If we look to eradication as the measure of success I think we're going to struggle. Bruce.

BA Thanks, Mike. Listening to the question I was just trying to untangle it, as Mike was a little bit, but really the way I heard it was, how much do we expect vaccines may change the shape of this epidemic or this pandemic?

00:39:42

In some ways we don't know but what we do know in 2021 is that we should be able to substantially change the human cost of this crisis through the use of vaccines. We know that this virus disproportionately affects certain populations; the older, as we've talked about, people with comorbidities, people who are highly exposed like healthcare workers.

So the real goal of vaccination this year is to take the heat out of this epidemic or this pandemic, is to, as Mike said, reduce the human toll in terms of deaths and severe disease. That comes back to the theme you're hearing again and again and again; we can only do that if there is sufficient equitable allocation of these products in a way that those populations at highest risk get reached everywhere.

I thought what was staggering today were the numbers that were released by the study that you heard presented and in the comments from the head of the ICC as to the economic case for doing what we know is the right thing from a moral or a health or a health equity perspective.

00:41:00

So the real goal this year; could we take the heat out of this pandemic with these products? That was always the goal and very definitely we think by the end of this year we could do that by it is going to take making some tough choices about how we equitably allocate and use what is right now a scarce product and will be for some months to come.

FC Thank you, Bruce. This is a good bridge. Inviting now our experts to answer the economic angle of this Wall Street Journal question. Professor Sebnem, do you want to answer? Mr John Denton, you will have the floor to. Over to you.

SKO Sure. I would like to highlight the global interconnection point again that Dr Denton made forcefully because here if we look at two scenarios we did in the study - one is that extreme scenario that gives you the nine trillion number, there is no vaccination whatsoever in the rest of the world but advanced economies recover immediately, right away, the beginning of 2021.

So the total cost is higher there, world cost because the rest of the world is bigger and then close to half is borne by advanced economies.

00:42:23

We got the more realistic scenario we worked out; advanced economies still had the disease in 2021, going back to the question from Wall Street Journal, but we still assume that they are done with vaccination mid-2021 and by the end of 2021, early 2022 half of emerging market and developing economies' population is vaccinated.

So there is more realism to this; we might not be there by the end of 2021 but in this scenario there is still disease going on in advanced economies half of the year. Very interestingly the global costs go down; you go down from nine to four but also very interesting the share advanced economies bear goes up.

Why is that? Because in this scenario we allow some vaccination also in developing market and emerging economies. That helps with exports and imports of advanced economies and advanced economies are larger so the world costs go down but they are going to bear a higher share because now they also have to deal with the disease in their own economies.

00:43:26

So these global interconnections both on the export side and also imported, intermediate input side can be really important in amplifying economic cost so it is extremely important to highlight again that there is an economic case to be made here on top of the moral case. Thank you.

FC Thank you, Professor. Mr Denton, you have the floor.

JD Thanks very much. Just picking up on a couple of things I'd make three quick points. First of all one thing Mike said which has really struck me; what we're seeing is with the history of epidemics and the way they work, with all the things that are happening the developed world and rich economies have a

greater chance of actually managing the trajectory and, as you say, eradication is not mark of success here for where we are.

But what we're really worried about without the equitable distribution is developing countries and the history is they will not be able to manage that trajectory and so you'll likely end up potentially with a managed trajectory in the north but actually an unmanaged trajectory in the south.

00:44:32

This is a real concern and will simply exacerbate, particularly with the new variants coming in and the speed with which they're moving and so that's why we really want to emphasise the output of our study, which has been so eloquently described by the previous speaker; that there's an economic case - and it's a compelling economic case, not just persuasive - to actually fully fund the COVAX facility.

The reality here is I've called out a number of countries but Japan, Australia, Canada and China and the US need to continue to step up and all the constituent parts of the European Union.

Two other quick points; first the issue the WSJ made about distribution. One element that we see - and we'll be mounting a global campaign on the involvement of the private sector to step up here and we'll be launching that during the course of the next week, which will cover multi dimensions including the output of this study.

The first is if you're going to have a successful national vaccine action plan you must involve the private sector. The wisdom and the knowledge and the innovation of the private sector in distribution can never be underestimated and it's the genius of the innovation of the private sector which will help on this distribution not just in developed countries but also in developing countries.

00:45:41

It's really important for those national vaccine action plans to involve deep engagement with the private sector. That was missing in the pandemic action plans of so many countries; engagement with the private sector and it's taken us a while to actually help get countries to realise the importance of that.

I shout out to Dr Tedros for realising the importance of engaging with the International Chamber of Commerce as a conduit to actually reach out to the private sector.

The third point - and if you look at the most recent trust index development [?] on vaccines and ensuring this 30 to 40% of people in Europe who are so suspect about taking a vaccine actually get confidence, the people that individuals trust, the entities they trust; it's not government, it's not international organisations, it's business.

Business; people have trust and confidence and we want to use that trust and confidence to help individuals and citizens understand the importance of accessing and actually utilising vaccinations as well and that will be part of the ICC's global campaign involving the private sector on a continual basis in the debate and the implementation of an effective, fair and equitable distribution of vaccinations and vaccinations across the globe.

FC Thank you both. I would like now to call on Gabriela Sotomayor from Proceso to ask the next question. Gabriela, can you hear me?

GA Hola. Happy birthday, Fabela. I have a question on Mexico. Mexico is betting everything on the vaccine, like my countries but it is one of the countries that does the least number of tests and now for example in Mexico City hospitals are at their maximum capacity, we have record numbers of cases and deaths. Until January 12th for example an average of eight people died every hour.

So my question is, do you think it's possible that one of the new variants is circulating and has not been detected due to the very low number of tests they do?

And on vaccines, medical personnel are in danger of missing their second dose due to Pfizer's problem with temporary suspension of shipments. Also the Government decided to vaccinate 20,000 teachers in Campeche, a state of Mexico, instead of health personnel.

00:48:10

So my question is, what is your assessment and that's it. Thank you.

FC Thank you, Gabriela. Dr Van Kerkhove will take this question and then maybe Dr Ryan.

MR Thank you and our best wishes to the President of Mexico. I know Dr Tedros sent a message earlier today but from all our staff here, we wish you a speedy recovery.

The situation in Mexico - we've hit 1.75 million cases and approaching 150,000 deaths and 19% of those cases require hospitalisation. You're right, the positivity rates are high which probably does - and I've said this again and again - does represent under-testing over many, many months and probably not the extent of testing that would have picked up even more cases.

Again there're over 200,000 cases amongst healthcare workers, 47% of whom are doctors and 40% are nurses and the rest are the support workers so again this has had a big impact on healthcare workers around the country.

00:49:26

We've seen similarly too indigenous populations; relatively low numbers, under 15,000 cases but that includes 2,000 deaths; that's one in seven people from indigenous communities who are sick dying so we've seen very important impacts on those groups.

In general bed availability in Mexico is quite good and there's 60% availability of COVID beds and about 40 to 50% availability of ICU beds so the health system in general is coping in Mexico.

With regard to vaccination policies, I think Bruce may speak to this. All countries are struggling with the issue of getting vaccine and then deciding the scheduling and whether they go for giving one dose to everybody and then trying to delay the second dose a little.

All countries are trying to do this pretty demanding arithmetic for what is the best combination so maybe Bruce or other colleagues online can speak to how we're advising there.

00:50:30

I would say in general that we're seeing a pattern in Central America that's stabilising. We're still seeing a pattern in South America, not just in Brazil; in Amazonas and other Amazonian provinces we've seen big impacts but we're also seeing rising cases in Colombia, in Peru.

While we're seeing stabilisation and falling-off of cases in places like Chile and Argentina and the southern cone there are parts of those countries that have intense outbreaks. So I would say the overall pattern in the Americas is beginning to stabilise.

The increases are not as stark as they have been but the health systems across the whole region are under pressure and people

in the rest of the world are very, very tired. So I'm sure vaccination couldn't come quick enough for people in the Americas and again remember, the Americas has been one of the most deeply and persistently affected regions in this whole pandemic.

Other regions have had a relative break; there was summer in Europe when there was a relatively small number of cases. We've seen for example in south-east Asia, Western Pacific, even in Africa smaller numbers but the Americas and particularly Central and South America have had a punishing pandemic in terms of the persistence and the relentless impact of the disease.

00:51:59

As such systems are under pressure and people need help and we hope the vaccine... As I said in answer to the previous question, vaccination can't come soon enough both to take pressure off those health systems and to protect those highly vulnerable people and countries are facing difficult choices.

I can't comment on the specifics of where Mexico has prioritised its specific patches of vaccine; I'm sorry, I don't have that level of detail but we can certainly check that out with our PAHO team and I will do so. Bruce.

BA Thanks, Mike. Gabriela, I thought one of the most important points you highlighted was right at the beginning of the comment when you talked about betting everything on the vaccine because of course if any country bets everything on the vaccine we're going to lose; that's the bottom line, certainly in 2021.

The vaccine is one tool but we need a full armamentarium if we're going to beat this virus. We need to make sure we've got our first, second, third lines of defence all working and your vaccine is going to be your first line of defence to help prevent people getting infected but people are still going to get infected.

00:53:09

We know we're in a scarce situation in terms of vaccine supply, you've got a virus that's changing all the time, you've got suboptimal uptake and hesitancy with the vaccine; there are many, many issues that'll affect coverage and the ultimate protection from the vaccines.

So that makes essential the second line of defence; you've got to be able to test, find that infection so that you can isolate people

who are infected, quarantine those who are in close contact and then you have to have your third line of defence.

You've got to have the ability to treat and give high-quality care with oxygen, dexamethasone, other life-saving therapies that we know can really, really reduce the rate of death to this disease. So now the good news in 2021 is we've got vaccines, we've got new rapid diagnostic tests that we know work, we know the combination of corticosteroids and oxygen and other interventions can substantially reduce the probability of dying.

00:54:08

So we have an extraordinary armamentarium when you compare us to where we were certainly when Maria and I were in China last year. But the reality is you need all three of those lines of defence if this is going to be successful.

Again when it comes to the use of the vaccines, these vaccines have gone through clinical trials and they've been tested a certain way. They've been tested as two-dose schedules for the vaccines that you mentioned; they've been tested with certain intervals and that's how we know they work; that's how they need to be used.

So we strongly recommend - and I think this has been a strong international consensus from the advisory boards, the big international advisory boards like SAGE that advise WHO - that we need to respect the interval that has been recommended for the use of these products.

That said, there are reasons there're going to be delays. Someone might get their first dose and there can be many, many reasons that they are not getting the second dose exactly at the right time. This can be because of many reasons that are out of people's control.

00:55:11

They're also out of the control of suppliers. We're dealing with a biologic process, with new products here so it is a new challenge to meet what are very, very demanding production schedules. But the important thing then is make sure you do get the second dose, to the point that you were saying, Gabriela, even if it is delayed; that is the message.

But the recommendation is use these vaccines the way they've been approved, the way they've been trialled because that's what we have data for and that's how we know they work best at this point.

That knowledge is evolving all the time. We'll get more knowledge and we also respect that certain countries will do things slightly differently - Mike, as you said - to try and address the circumstances in their particular environments.

FC Thank you. Dr Van Kerkhove.

MK Thanks, just to add a couple of small points because you mentioned the variants and I know that there are a lot of people that are concerned about the virus and changes in the virus and what this means and does this totally change the game.

00:56:11

I just want to reiterate that everything that we are learning about these variants doesn't change our approach to controlling COVID. There are four elements that countries are working towards and you hear us talk about these all the time; prevention, control, treatment, vaccination; all of these elements that you've heard us talking about.

Now we have vaccines and vaccinations. It will take longer than all of us want for vaccinations to have the impact that they will have but we have other tools. We have to right now prevent as many cases as we possibly can for all of the reasons that you know very well; not only to make sure that we keep ourselves safe but we keep our loved ones safe, those who have more underlying conditions, who are at higher risk of developing severe disease and dying.

We have options for control. It's all of those elements of active case finding, rapid, reliable tests, making sure that individuals know if they are infected or not, making sure that they are put in a clinical care pathway and receive quick assessment, oxygen, dexamethasone if they are severe or critical and more therapeutics that are coming online.

00:57:22

We need to make sure that we prevent infections through vaccination, we make sure we do individual-level measures like hand hygiene and physical distancing. All of that still holds true. Don't forget that we still have some power over this virus no matter where we live and as these vaccines come online you still have some control over what you up do during your day, over the exposures that you may or may not have and you have information, you have knowledge, you have tools that you can take to prevent yourself and your loved ones from getting infected so I don't want you to forget that.

Even with these variants and what we understand with these variants, these control measures work. We are seeing reduced incidence in a number of countries that have different virus variants that have been identified; in South Africa, in the United Kingdom, in Ireland, in Denmark the control measures work.

So don't forget that we still have this control and countries are doing what they can. I am struck by the conversations we are having one year into this and thinking, I want people to remember that there's still a lot that we've learned and that there's a lot that we can do. So prevention, control, treatment, vaccination. Thanks.

00:58:43

MR Just to add specifically that we don't have specific information on sequences in Mexico per se. I'm sure that Mexico has uploaded some sequences to some of the platforms but we haven't any indication as yet of any unusual or variant strains on the Mexico side of things.

It is though important - and you mentioned the point - that the more testing you do the better and that's good for control, that's good for understanding the epidemiology. But a proportion of those samples should be sequenced so it should be done as systematically as possible but not every single test needs to be sequenced, not every single virus and you need targeted sequencing when you see unusual clusters or unusual patterns of transmission or unusual clinical presentations.

00:59:29

So what we're trying to do with variant surveillance is to ensure that we're just watching out over all of the disease that's happening in the world of COVID, trying to pick out any unusual signal and ensuring that we're specifically targeting not only testing but sequencing in those areas.

Maria and the group here are working on a systematic framework for doing that with countries and we hope that all countries who wish to enhance their genetic sequencing capacity and contribute that data to the global knowledge will be able to do so.

If they wish to make that commitment and wish to buy into that we are certainly in a position to help connect them with the necessary technology and training to achieve that.

FC Thank you. Maybe we can take a last question from South Africa; Sophie from SABC. Sophie, can you hear me? Sophie? Can

you please unmute yourself, Sophie from SABC? Sophie? If not maybe we can close with the last question from Kai from Science. Kai.

KA Yes, thank you very much for taking the question. It follows neatly from the last one. I wanted to ask; Moderna announced today some good results in terms of their vaccine against the South African variant and the UK variant but they also said that they were working on updating, on developing a booster shot essentially both based on the normal virus and based on the variant that was first described in South Africa.

01:01:28

I would just like to get an opinion from WHO on what you would like to see from other manufacturers in terms of doing this and is the regulatory approval - do you feel it is clear what the regulatory approval will be if indeed it becomes necessary to update a vaccine?

FC Thank you, Kai. Dr Aylward.

BA Hi, Kai. That's a great question and in fact one of the things that we're doing right this week in the area of the ACT Accelerator is we're revising the whole strategic plan or refreshing it, let's say, in light of what's going to be necessary in 2021.

Some of the big drivers of that of course are the increasing detection of the mutations, of the variants that we're seeing, the variants of concern, let's say, with particularly the changes in the spike protein. The other big driver of course that we're working against is just the demand for vaccine so these are the big things affecting the work.

01:02:33

While our first priority going forward is going to be the roll-out of the vaccines that we have - because as you've reinforced and as Maria said earlier, we know that these are working against the variants at this point so the important thing is to get those things out, as much coverage as possible, protect as many people as possible.

But the second priority that we're building into that is how we bolster the whole R&D agenda and it's really the agenda across the research and development, across the product assessment work that we do.

And then of course regulatory pathways work, exactly to the point that you mentioned, Kai, because what we have to define is what is the regulatory pathway if necessary for strain changes so that's exactly the programme of work that's kicking off right now.

In terms of from the manufacturer side what we're going to be looking for is the same kind of collaboration in the early stages of this disease that we saw last year where there was a great sharing of information and alignment around what are the assays we're going to be using, what are the correlates of protection, what are going to be the key strains that we'll be using.

01:03:46

So all of that you want to get as standardised as possible and then the trial design standardised, etc, so that you can compare across products as well. So I think we're going to be going into a period where we'll want to be seeing even more collaboration across producers to try and then together look at how we both assess the changing environment we're in with the variants but then also how we respond to it in terms of R&D, product assessment work, regulatory work when it comes to strain changes.

So very much at an early stage in that but fantastic that Moderna and others are already looking at what does it actually mean for their products as they go forward because as we've seen over the last year - and science has done an extraordinary job in this crisis and again to the point that Maria made a little bit earlier, variants of concern are there indeed but I think we've got the science now, if we harness it properly, to stay in front of it as the nature of this pandemic and the virus unfolds.

01:04:57

MK Thanks. I just want to take it a step up from that as well because it does link to this monitoring framework that we are establishing and then linking to exactly what Bruce just described. What we're trying to do is working with partners around the world to make sure that we have an enhanced system to detect a change in the virus when it emerges.

But we also want to be more proactive so if we're looking at different types of mutations that we are seeing we want to look at combinations and we are seeing some of these different variants identified in different countries. Those need to be evaluated properly so we're doing this through enhanced epidemiologic surveillance around the world, making sure that we have robust systems to track this virus and who is infected

with this virus so first and foremost we can reduce transmission but also so that we can look for any changes, any significant changes in transmission where we wouldn't expect it; for example in an area where interventions are in place and we're still seeing transmission.

That was how the United Kingdom identified their virus variants in November and December - but also if there's a change in severity. We want to increase sequencing surveillance around the world and we have incredible sequencing surveillance, increased over the last year but that needs to be stronger.

01:06:14

So we're looking to leverage existing systems and we already are doing so so we're not starting from scratch. We have the GRS global flu network in which 89 labs are currently doing full genome sequencing for SARS-CoV2 already and we want to increase that. We're very thankful for our flu partners.

We have the SARS-CoV2 network, many of which are overlapping with the flu network of course. We want to harness the expertise of the polio networks, our HIV networks, our TB networks because there are systems in countries that can do sequencing and the more sequencing that we have the more sequences that can be shared.

So in addition to doing that we are working with our partners to share those sequences on platforms like GISAID and others, with metadata so that we can analyse them and carry out bioinformatics and phylogenetics.

01:07:07

We have our virus evolution working group that is tracking each of these mutations and understanding and designing and collaborating on which lab studies need to be done. This is just looking at mutations, looking at variants of interest and then variants of concern.

Then of course we need to link with the manufacturers, with the animal model working groups and Bruce outlined what those studies need to look like. This is a process. This is something that needs to be done in a robust, transparent, co-ordinated manner and we need to make sure that partners are being utilised to be able to carry this out.

Again we are leveraging existing systems, we are not starting from scratch. We have the R&D blueprint for epidemics. We held

a meeting a few weeks ago to outline all of the studies that need to be done again in a co-ordinated manner.

We had a meeting a few days later again organised by the R&D blueprint looking at vaccines so this is something that will continue, this is something that will be enhanced over time. Viruses do change but I go back to what I said previously; we still need to focus everything we can on preventing as many infections as we can while monitoring virus circulation globally.

FC Thank you all. I would like now to hand over to Dr Tedros for final comments. Over to you, Dr Tedros.

01:08:33

TAG Thank you. Thank you, Fadela and my appreciation again to John and Professor Sebnem for joining us and thank you also to all colleagues from the media who joined. See you in our next presser.

FC Thank you, Dr Tedros. You will receive the DG's remarks and the audio file of this press conference just after this press conference. The full transcript will be posted tomorrow morning and for journalists who were not able to ask questions please don't hesitate to contact the media team of WHO for any pressing questions you have. Have a nice evening and see you next time. Bye.

01:09:25