



World Health Organization

VIRTUAL PRESS CONFERENCE 6 MARCH, 2020 ON COVID-19

Speaker key:

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TJ	Tarik Jasarevic
MR	Dr Michael Ryan
SH	Shane
UM	Unidentified male speakers
KE	Ken
MK	Dr Maria Van Kerkhove
AD	Adrian
BA	Banjo
EL	Elaine
SH	Shoka
JA	Jamie
GA	Gabriela
MA	Marian
ZA	Zara
HE	Helen
AM	Anna-Maria

TAG Good morning. Thank you once again for joining us in person and online. I would like to start by acknowledging International Women's Day on Sunday. This is a moment to remember that around the world many women cannot access essential health services and continue to suffer disproportionately from preventable and treatable diseases. But International Women's Day is an opportunity not only to promote and protect the health of women but to highlight the vital role they play in promoting and protecting the health of all people.

Globally women make up 70% of the global health workforce but hold only 25% of senior roles. WHO is committed to promoting gender equality everywhere and especially in the health workforce. We're proud that we have achieved gender equality in our senior leadership team at WHO headquarters although we know we still have to work to do in other parts of the organisation.

Women are also playing a vital role in the response to COVID-19 and we're proud to have many amazing women leading our response in WHO including Maria, Sylvie, Somia, Anna-Maria, Maria-Angela, Marie-Pierre, Adriana, Gabi, Nyka and many others.

In the past 24 hours 2,736 cases of COVID-19 were reported from 47 countries and territories. There is now a total of 98,023 reported cases of COVID-19 globally and 3,380 deaths. We're now on the verge of reaching 100,000 confirmed cases. As cases increase we're continuing to recommend that all countries make containment their highest priority. We continue to call on countries to find, test, isolate and care for every case and to trace every contact.

Slowing down the epidemic saves lives and buys time for preparedness and for research and development. Every day we can slow the epidemic is another day hospitals can prepare themselves for cases. Every day we slow down the epidemic is another day governments can prepared their health workers to detect, test, treat and care for patients. Every day we slow down the epidemic is another day closer to having vaccines and therapeutics which can in turn prevent infections and save lives.

As you know, last month WHO convened a meeting of more than 400 scientists to identify research priorities. Hundreds of ideas were discussed and debated and today we're publishing an R&D roadmap which distils those ideas into a core group of priorities in nine key areas. These include the natural history of the virus, epidemiology, vaccines, diagnostics, therapeutics, clinical management, ethical considerations, social sciences and more.

The R&D roadmap focuses on research that can save lives now as well as longer-term research priorities for vaccines and therapeutics. It's vital to co-ordinate research so that different groups around the world complement each other so WHO can give better advice and countries can take evidence-based decisions that save lives.

That's why WHO has developed a set of core protocols that outline standards of how studies should be done and to collect critical data so we can compare apples with apples and pool data from multiple studies. France and South Africa have already indicated they will use these protocols for clinical trials and we encourage other countries to do the same.

We're also developing research protocols to assess interventions for disenfranchised communities such as refugees and internally displaced persons. We're very encouraged by the level of interest around the world in accelerating research as part of the response. So far WHO has received applications for review and approval of 40 diagnostic tests, 20 vaccines are in development and many clinical trials of therapeutics are underway.

Even as we test therapeutics we need to ensure that supplies of those medicines are available should they prove effective. WHO has been monitoring the potential risk of a disruption to medicine supplies as a result of the COVID-19 epidemic. China, as you know, is a major producer of active pharmaceutical ingredients and the intermediate products that are used to produce medicines in other countries.

WHO has focused on the most essential medicines that are critical for primary healthcare and emergencies including antibiotics, painkillers and treatment for diabetes, hypertension, HIV, tuberculosis and malaria. WHO is working closely with industry associations, regulators and other partners to monitor this risk and so far we have not identified any imminent specific

shortages. Many manufacturers either have alternative sources of ingredients or had stocks to draw on. Manufacturing has now resumed in most places in China although some challenges remain.

Separately WHO has developed a list of more than 20 essential medical devices that countries need to manage patients including ventilators and oxygen supply systems. Access to medical oxygen could be the difference between life and death for some patients but there is already a shortage in many countries which could be exacerbated by this epidemic.

WHO has an existing working group with the Gates Foundation, the Clinton Health Access Initiative and PATH and we're building on that partnership to increase access to oxygen. We encourage every country to review WHO's disease commodity package for COVID-19 to ensure it has the supplies it needs including protective equipment and medical devices.

All of this requires the involvement of the private sector to ensure countries can access life-saving products. You have heard me talk about the market failure for personal protective equipment. You heard me talk about the need for a whole-of-government approach and you have heard me talk about what individuals can do to protect themselves and others.

We look forward - to businesses to step up and play their part. We need you. WHO is working with the World Economic Forum to engage companies around the world and earlier this week I spoke to more than 200 CEOs about how they can protect their staff and customers, ensure business continuity and contribute to the response.

As I keep saying, we're all in this together and we all have a role to play. Facts, not fear; reasons, not rumours; solidarity, not stigma. I thank you.

TJ Thank you very much, Dr Tedros, for these opening remarks. We will start with questions here from the room. We will start with Shane, then Madea and then we'll have a question here.

SH Shane [Unclear], Xinhua news agency. The epicentre of the epidemic is in China of course. Recently a Fox News host demanded a formal apology from the Chinese for the outbreak of coronavirus. What's the comment from WHO towards that remark? Thank you.

MR I'm not aware of the comment but I think we've said numerous times in previous conferences that diseases can emerge anywhere on the planet and have proven to do so. Ebola emerges very often in Africa. The last pandemic emerged in North America of H1N1 and coronavirus has in this case emerged in China so I think issue now, as the DG has just said; can we avoid blame culture and can we do the things we need to do to save lives.

TJ Thank you very much. Madea please and then we'll go to [unclear].

UM Official [unclear] in response shows a huge spike in identified cases of COVID-19. The spokesperson of the health ministry today said that they'd identified more than 1,200 in the past 24 hours. How does WHO categorise or assess the way the outbreak is managed in Iran especially when we have no information on that [?]?

MR It's very important in epidemic response to understand your problem because without understanding your problem it's very difficult to fix it. We've seen this; China's numbers went

up very, very quickly because they started to look for cases; the same happened in Korea when Korea started to do active surveillance. Then you can turn a corner so I think we need to look at these data in terms of, yes, natural epidemiology.

But also, I think because the Iranian system is switching on, we're seeing a much more all-of-government approach as the DG called for yesterday, there's a national action plan now; there're 100,000 workers committed to this plan and we are going to see... Any country in the face of an epidemic when it looks for cases will find them and if we call that a bad thing - it is; it's a sad thing for the people who have the disease but it's much better that we understand the extent of the problem

So we commend the move towards more aggressive, targeted surveillance and we hope that that will lead to the kind of control measures that can help push this virus back.

TJ Thank you very much. One question here. Then we will move online. One question please.

KE Hi. My name's Ken. I'm from the Japanese newspaper Yomiuri. I'd like to ask about Japan and Korea's travel restrictions. Both nations have been implemented travel policies against each other and in Japan part of the Korean measures are taken to be retaliatory. Can you tell us to what extent these travel restrictions are meaningful and do you have any concerns on countries countering and escalating against each other?

MR I think we've been pretty clear on the issue of travel restrictions for a very long time; they should be very carefully considered, they should be public-health-evidence-driven, they should be of short duration and they should never be carried out in the absence of a comprehensive set of measures to contain or control the disease.

There is a long history unfortunately of countries sometimes with tit-for-tat travel restrictions and that has happened in the past. Since the advent of the IHR in fact we've seen a huge improvement of that and in transparency between countries because we challenge countries who put in place travel restrictions and we challenge them to provide the public health evidence.

I think again Japan and Korea are both doing a fine job in the face of this epidemic. They've both scaled up their public health operations. They're saving lives and I think we should be focusing on that and not necessarily on political spats over travel restrictions. It's very, very important that people understand that these types of restrictions are not helping and in that sense to overemphasise them is to hurt the response. But we do commend both governments for making significant progress in fighting this disease.

MK If I could just say something to the contrary to that in the sense that what we are seeing and what the stories need to be focusing on is how countries are helping each other and we see a lot of examples of this. The DG mentioned this research meeting that took place on 11th and 12th. We've been talking since the beginning of scientists communicating with each other, clinicians talking to each other on the phone, sharing experiences.

When the world didn't have experience with COVID-19 we had MERS scientists teaching each other about what they did to help patients with MERS, patients with SARS and I think there're a lot of very positive stories here where countries are helping each other. We have a

Chinese delegation in Iran right now. We have people participating and sharing and I think that there're a lot of lessons to be learned in that.

This is not the first outbreak where this has happened before. WHO brings together scientists all over the world, public health professionals, women on the front lines and I think those are stories that also need to make the headlines as well.

TAG I would like to add to that, in a globalised world the only option is to stand together. All countries should really make sure that we stand together and in addition to that, as you know, COVID-19 is a common enemy and the only way we can beat this virus is when we stand together. That has been the message from WHO all along and it is and it will be so we call on all countries to stand in unison because it's the united force that can help us to beat this virus as soon as possible.

TJ Thank you very much. We will now go to some journalists who are online and I will remind everyone it's * 9 if you are dialling in and click raised hand if you are on Zoom. We will start with Romania. We have Adrian in Romania. Adrian, can you hear us?

AD Yes, hello. I'm from Pro TV, Romania. Speaking about Europe, in your estimation do you think that during the summer the spread of COVID-19 will decrease?

Another thing; I want to know if World Health Organization experts sent to all the countries [inaudible] persons because we have some problems here in Romania. What are the criteria you set when you consider a person suspected of being infected with coronavirus? Are there standard procedures?

TJ Adrian, we lost you in the middle. Can you please repeat the question? Sorry for that.

AD Speaking about Europe, in your estimation do you think that during the summer the spread of COVID-19 will decrease?

Another thing; I want to know if World Health Organization experts sent to all the countries some procedures, how to test a person. What are the criteria you set when you consider a person suspected of being infected with coronavirus?

MR I think Maria can take the question on seasonality. I think our regional director... We've had multiple meetings with the European countries across our whole region plus at the European Union level with the European Centre for Disease Control. Our regional director has been again in meetings today with European health ministers and co-ordinating actions between countries.

We do not know yet what the activity or the behaviour of this virus will be in different climatic conditions. We have to assume that the virus will continue to have the capacity to spread and it's a false hope to say, yes, it will just disappear in the summertime like influenza virus. We hope it does; that would be a godsend but we can't make that assumption and there is no evidence right now to suggest that that will happen so we need to fight the virus now, not live in hope that the virus may disappear on its own.

On the issue of definitions there are very specific case definitions that have been released and updated on a regular basis by WHO. Maria may want to go into detail on the criteria.

MK Yes, we do publish surveillance guidance on our website as we do with all of our technical guidance and we are constantly looking at the evolving situation to update those. Our case definitions are focusing on people of interest; who should be tested. It's a combination of factors; it has to do with where a person is, where they are living, where they have travelled.

It has to do with if they have symptoms or not and what level of symptoms they have so our latest guidance is on the WHO website and there's a very detailed description of who should be tested.

MR Again to be clear, when there's a high index of suspicion from a clinician that the clinical syndrome is consistent the clinician is in a position to request a test. The test is not restrictive, the criteria are not restrictive. What we have to be careful of is that if every single person with a sniffle is to be tested then we will run out of the capacity to test so there are major criteria but that final decision is very much left in the hand of the attending physician based on their instinct or clinical judgement.

If there are symptoms highly consistent with the COVID infection that physician may request that test or that is at least WHO's advice.

MK Yes, and contacts; that's the other one; not just that index of suspicion but also if you have a confirmed case and you're looking at the contacts of those cases they need to be tested as well.

TJ Thank you very much. The next question came via message because there was Steve from Uganda, from MBS TV in Uganda. He's asking what measures have been put in place to contain the virus in Uganda, he says, Uganda being a poor country.

MR I think Uganda has proven its capacities over the last year-and-a-half and Uganda's invested heavily in its preparedness for Ebola and imported unfortunately Ebola twice from Congo and contained that disease without any further cases. Uganda has a lot of capacity and history in dealing with severe emerging disease that spreads from person to person and requires the isolation of cases and the follow-up of contacts.

As the director-general has been saying for years now, this is about preparedness. You prepare for one disease, you prepare for all diseases. Preparing for Ebola gives you capacities against COVID; preparing for flu gives you capacities against other diseases and what we hope is that these investments that are being made by countries like Uganda and that we want to make under the new emergency preparedness division here are WHO; it's really important that we focus on that.

Uganda has a strong system but we are concerned that there are countries who have much weaker surveillance, much weaker health systems and we need to continue to support all countries in getting ready. The DG may have a comment on the...

TAG [Inaudible]. Thank you.

TJ Thank you very much. This was the answer to a question from Steve from Uganda MBS TV. If Chris is fine we can go to one more question or two more questions from online;

Elaine Fletcher from Health Policy Watch. [Inaudible]. We'll start with Banjo Cower from Down To Earth India. Banjo, can you hear us?

BA Yes, I can hear you. Can you hear me?

TJ Yes, please go ahead.

BA My question is to Dr Maria. Maria, we had only five cases two, three days ago but now we are up to 30, 31 cases but the testing criteria in our country are limited to suspected cases or to the ones who had any contact with the confirmed cases. Do you recommend, as Dr Mike was saying, that we should now expand our criteria and a clinician, if he finds that it is necessary, be allowed to recommend a test, an investigation test?

MK Thank you for the question. We put out recommendations of what we feel is most appropriate for testing and it is important that countries look at these and they make an assessment of what is best for their country. Our guidance is out there to be aggressive at finding all cases among people of suspicion and ensuring that the contacts of those cases are also tested so that we can prevent onward transmission.

Decisions need to be made based on capacity, based on many different factors but it really is important especially early on - as you said, you have some case in your country. It's very important that there's an aggressive approach in the beginning, that you look for all of those cases because as case numbers increase systems become overwhelmed.

So as much as can be done in the early stages of this, the better chance you have to delay and to reduce and suppress transmission.

TJ Thank you very much. We will now go to Elaine Fletcher from Health Policy Watch. Elaine, please go ahead. I'm sorry for...

EL No, thank you. Hi, thanks for taking my question. The World Bank announced recently that it will put its spring meeting in a virtual format and that move was applauded in many quarters as something that would also save carbon emissions and travel costs which are significant for global organisations. Many private companies meanwhile have also begun to encourage teleworking as a pre-emptive move to reduce infection risk. What's your message on these topics and is WHO making contingency plans for a virtual World Health Assembly?

MR Yes, I'll leave the DG to comment on the World Health Assembly. I think we advise a risk management approach to all of these different gatherings and meetings and I think we are entering a new era on this planet in terms of our movement and how we engage and how we interact with each other and it's wonderful to see that we have alternatives now to necessarily having to meet face-to-face all the time and if there is a benefit to the planet then that is great but we would obviously rather not have COVID-19 and the fear and the disruption that it's causing.

But life has to go on, our economies, our societies, our communities have to continue to work, to live, to educate but I think we also need to innovate and it's wonderful to see the innovation in education, the innovations in communications, the innovations in our capacity to continue doing the things we do but maybe using alternative ways of achieving the same ends.

If there are benefits to our planet for that and to our society in general that's great but I think we'd like to get rid of COVID-19 too.

TAG Yes. Maybe to add to that, I know we will have this COVID-19 behind us and virtual meetings should actually be considered not because of COVID now but when there is no COVID. We have to challenge all our meetings, whether we really need to meet in person so that's our advice.

But in the middle of the COVID-19 now, as Mike said, we have to do the risk assessment and make our decisions based on that. But the virtual meetings, teleworking should actually be an issue even when we don't have COVID around. As you said, one added advantage is minimising the carbon footprint but there will be other advantages too.

TJ We'll go back to...

TAG On Assembly, we still have time so we will assess the situation. What we said; based on the risk we will decide, we will let you know.

TJ Thank you very much. We will go back here but we will take one or two from the room because we want to go back online. You will remember yesterday we had issues and we didn't take questions from our colleagues. Yes, please. Shoka and then Jamie and then we will go back online.

SH Hello, [inaudible]. Dr Tedros, you just mentioned that the number of confirmed cases is now reaching 100,000 and it's spread to 88 countries [inaudible]. Do you consider it as a new phase or how do you characterise this situation? Thank you.

TAG I said it yesterday; it's geographically expanding and it's deeply concerning. But at the same time the most concerning is out of the 88 countries we're seeing more countries affected from the low income with weaker health systems. That's the most concerning and we're working with all countries to tailor the response they should take based on their situation.

Our focus will be to support countries with weaker health systems. There was a question from Uganda earlier. I fully agree with what our general said on Uganda. Its preparedness level has increased significantly, especially after Ebola in DRC and we have seen how it has been responding.

But still we will continue to support especially the countries with weaker health systems to help them to better respond. That will be our focus and that's why we had a meeting with all AU ministers a couple of weeks ago to discuss continental strategy for preparedness and also national strategy for preparedness.

TJ Jamie, your question please.

JA Hi, Jamie, Associated Press. I'd like to go back to behavioural things that people can do because I think there's still a lot of confusion out there about what people can do. You mentioned coughing or sneezing into your arm, etc, but what about in terms of their households; are there things that they should do, should they be buying bleach, should they

be touching their faces with Kleenexes? What kind of things can people do to make themselves live more... by greater sanitation to be able to prevent the spread?

MK I'll start with this and you may want to supplement. It's very important that everyone knows that there are many things that they can do to protect themselves and to protect their families against COVID-19 and to protect against any infectious threats. The first is washing your hands. You've heard us say this many times; it's absolutely critical that people wash their hands and there's a process for doing so and using soap and water or using an alcohol rub. That's the first thing.

The second thing is respiratory etiquette. We see many people not practising respiratory etiquette and this is really important; this is very simple. You and your family and everyone you know can do this. It's sneezing into your elbow, it's sneezing into a tissue and throwing this into a closed bin and then washing your hands, making sure that you are well-informed.

You all know this very well in this room but this situation is evolving quickly, we're learning new information every single day and we're trying to communicate that information to you as quickly as possible, making sure that that information is accurate. There's a lot of false information that is out there, there are a lot of myths that are out there that are not only confusing but sometimes could be damaging so that's important.

You can get your families ready, you can talk to your children, you can talk to your parents, you can talk to older people; if you have neighbours that don't live with other people talk to them, find out, what do they need to know, what are their fears. As the DG has said many times, facts, not fears; let's address these fears and turn this fear into some positive action.

You can talk to your employers, you can talk to your government; what are you doing to get ready, how are we getting ready, what's the plan? So there're a lot of things that you can do to get yourselves ready so that you can anticipate what may come. We've said this before; that there is no eventuality here. We are working with governments, with individuals to make sure that everything is done to drive this down, to slow transmission, to stop transmission so that is possible and we're seeing that in many countries but it all depends on the actions that we take now.

The situation could get worse; the situation could get better. We need to prepare for different situations.

TJ Thank you very much. Gabriela, you are next to me; please go ahead.

GA Thank you so much. Dr Tedros, could you say something about Switzerland? We are here so if you can talk about this and the measures that they have taken; what is your opinion on that? Thank you.

TAG Gabriela likes to ask me so I say...

MR [Overtalking] chance to answer.

TAG I have a general here.

MR First of all we express our gratitude to the Government in Switzerland for their co-operation with us and all of the other UN agencies in terms of our own business continuity planning and other things here. There's a big international community here in Geneva and we've been working very closely with them on how we deal with business continuity going forward.

You can imagine, we have our own concerns too to be able to continue to run our operations in WHO not only for our normal health programmes but to be able to continue running a global operation here or a global nerve centre so we thank the Swiss authorities for their continued co-operation. I believe the Swiss authorities are implementing measures from their pre-plans, preparedness plans and are engaging very closely with other countries and trying to co-ordinate activity across many countries.

I think that's been the challenge for everyone in Europe right now, co-ordinating activities across all of the nations of Europe with such open borders and many having slightly different policies regarding mass gatherings, slightly different criteria regarding testing. I think that's caused a lot of people to question why there isn't one standard approach in every country but that's impossible to achieve.

What we need is each country making its own risk assessments based on the risks it perceives, its openness, its exposure and its own vulnerabilities and we continue to say this. What we will do is always, when asked - and sometimes even when not asked - offer advice to countries regarding the approaches they're taking to risk management.

So I don't have any specific comments to make on the Swiss response unless there's some specific issue you're concerned with because it's a good public health system responding to the issues that it faces.

TJ Thank you very much. Let's try to take a couple more questions from online to make up for yesterday. Marian Benitez from Hong Kong, can you hear us?

MA Yes, can you hear me? Thanks for taking my call. This afternoon the University of Hong Kong and their Wuhan counterparts released a study showing that the mortality rate from COVID-19 is much lower than the one the WHO has said of 3.4%. They said that [inaudible] days' time and it could be lower. But is mortality rate really important and what's the implication of that? What does WHO think about studying the mortality rate at this stage when we don't have... there are so many unknowns [inaudible]?

TJ Thank you, Marian. I think we understood the question.

MK Yes. Studying mortality is very important in any infectious disease and in any disease period and from the beginning our biggest concerns, our biggest questions were around the transmissibility of this virus and the severity of this virus. We have been up here talking to you about the difficulties in calculating mortality rate and what that actually means especially early on in an outbreak and there are many studies that describe why this is very difficult.

So there could be simple arithmetic in terms of what we say but the study that you're referring to is a modelling study and we work very closely with the University of Hong Kong. They're a WHO collaborating centre and there are many studies that have tried to estimate what mortality would look like if we consider everyone that may be infected with this virus.

You've heard us talk about serosurveys and making sure that there're certain population-based serosurveys that are conducted and those are critical so that we really understand the extent of infection in the general population. We've mentioned those studies are underway but it will take some time to get those results.

In the meantime we work with many different modelling groups that help us to try to use mathematical models to estimate what population infection may look like. That study in fact is a modelling study that's looking and making an estimate of a mortality rate which I think is about 1% in that study.

We've said before that the true mortality rate we don't know at this time. What we can say is how many people have died up to this date but we do look to our partners to estimate mortality. If we take into consideration the estimated number of people that may be infected the mortality rate will go down so it will take some time before we actually get a true value but it is a very important value for us.

Any death is significant and, as we've mentioned, the steps that need to be taken to make sure we slow down this virus will save lives. All of the efforts towards containment will save lives.

MR Maybe I could add to that that obviously a lot of the speculation, the modelling and the attempt to understand this - why so few people under 40 have been clinically unwell. Most of the people who are really sick are between the ages of 40 and 90 and therefore when we look to calculate case fatality, yes, we could add in a whole bunch of young people and children who may be getting infected and are not getting sick and that's important and the overall case fatality will drop.

That may not necessarily affect the experience of older people and remember within this if you look at the data from China based on the numbers reported the actual case fatality for people in the older age group goes up with age and goes up significantly with the presence of underlying conditions. So the actual age-specific or condition-specific mortality could be much higher than those numbers so the numbers could be higher for individuals who have underlying conditions and equally we have an assumption that children are maybe getting infected and are having mild infections.

I personally have experienced in the past influenza epidemics amongst children with low nutrition, children in compromised refugee-type settings and their mortality can be much higher. They're much more vulnerable, they're living in much more exposed conditions. We've seen what normal respiratory infection can do in refugee camps and anyone who's worked in a refugee camp knows how devastating viral disease can be in those situations.

So while we can make some assumptions and we hope for the best - and I hope fervently that we find that there are millions of people who've been infected asymptotically and the overall mortality is lower. That's not something we hope for but we have to look to those - and the DG keeps speaking about this - look to those around you who are most vulnerable, look to the people who are older, look to the people with underlying conditions, look to our refugee populations, look to the undernourished, look to people who may have other long-term infectious conditions.

That's what we need to do in order that we put in place the necessary services to protect and save their lives and that's the approach. But we do hope over time that as we do the serology we find that the overall fatality is lower.

TJ Thank you very much. Let's try to take two more questions. We have BuzzFeed; if I'm not wrong it's Zahra Hijri but please correct me. Can you hear us?

ZA Hi, thank you. Yes, it's Zara Hirjee. I've been seeing some mixed reporting out of China about whether people can get re-infected versus being released from hospitals prematurely. Can you provide clarity on what is actually known at this point about the potential for reinfection?

MK What we know is there're certain discharge criteria that are used in China and in many countries and in fact our recommendation is that an individual needs to have two negative PCR tests 24 hours apart. What we've seen from China; there're some case reports of individuals who will test negative and be clinically recovered but after some days may test positive again.

What we need to understand is in each of those situations is it a matter of the way that the test was done and perhaps how the sample was collected, the performance of the PCR test and if the individual was just borderline positive/negative or whether they were reinfected. From the evidence we have it doesn't indicate that they've been reinfected. It's likely that there's just been some virus persistence.

What we need to also understand is just because people are PCR-positive; if they tested negative and then test positive again we need to understand if that's infectious and so we need prospective studies of individuals who have recovered over time and following them after their recovery to take repeated samples to understand if they're still shedding and if they are infectious.

TAG Yes. While agreeing with what Maria said, even in other countries there is one concern we have. Hospitals have been running very lean and mean, especially in high-income countries; creating a lot of efficiency and, when I say lean and mean, making it very close to what they need during normal times, the number of beds they need and so on.

That's why we see some surprise in high-income countries and when emergencies actually arrive then triggering or expanding that lean and mean system becomes a bit difficult and time-taking. That may even force some countries to discharge patients early because the system is adapted to a lean and mean approach.

I think this is a question for even the long term. Okay, running hospitals in a lean and mean fashion could be okay during regular times but how can we expand the capacity in a few hours when the need comes? It's not COVID only, by the way; it could be earthquake or it could be tsunami; it could be another disaster whether it's man-made or natural so I think we have to check that approach we have, especially in many countries, of running hospitals in a very lean and mean way.

I know some countries couldn't even have isolation facilities that can accommodate even ten or 20 and it shows how vulnerable we are and the discharging and so on early could happen because of that.

TJ We'll try to take Thomas from Bloomberg, who was not able to ask questions a couple of days in a row. Thomas, if you hear us please go ahead.

[Inaudible]

TJ Do we have anyone online? I apologise for that. I apologise to Thomas and to Helen. We will make sure that your questions are...

HE Hi, I think I've been unmuted. I'm not Thomas from Bloomberg. It's Helen Branswell from Stat. Sorry for the delay; just realised I was unmuted. My question is about the clinical trials in China for the therapeutics. Are you getting any word yet about how those are turning out, is there any chance of data soon?

MK I will start but I will turn to my colleagues to finish that. As you know, Helen, there are many clinical trials that are currently underway in China; there are more than 200 registered on the clinical trials list and we know that they're actively underway looking at different therapeutics, looking at traditional Chinese medicine. Anna-Maria, do you want to comment in more detail on that please?

AM Thank you very much. Yes, we have a very good collaboration with researchers in China. In fact they even share with us preliminary information as they move forward with the analysis. They are planning to soon start releasing and publishing some of their results. I just want to say that they have done great work. We have counted about 180 publications internationally which have been released and information is available to the public.

There are over 50 publications in the Chinese language that have been made available. Where we're engaging with them now is in the translation of this information, in seeing what the numerous tests that were conducted mean for public health and whether or not we need to adjust our ideas for clinical trials elsewhere and also how we can learn from the implementation of these trials because there is a great expertise now in China that we would like to build upon.

So we are working with them very closely and they are very forthcoming and transparent with us.

MR Just to supplement because there's more to be done than just China, we have issued master protocols for clinical trials, for serology studies, for others and working under the leadership of Anna-Maria and Marie-Pierre, Razi and our chief scientist, Sumia, we need to bring all of that data together.

We're pulling together a data monitoring board, an independent board of expert who will monitor and analyse that data with us because we need to ensure that all of the available information regarding clinical trials is pulled together so we have the best possible assessment of all of the data.

So we commend the researchers for all of the work they're doing independently and with us. We commend those who are willing to work on implementing this more standardised approach and we believe by doing that we will get to answers more quickly and the evidence for these products will be much more solid and much more reliable.

We thank all of those around the world at the research level and governments and others for that form of collaboration. It is through this kind of innovation and sharing that we will get the answers more quickly than we would otherwise. We also have to look beyond the issue of efficacy, having an effective drug - and we hope these are effective. We also have to ensure that those who most need those drugs get them and that is not the same as drug efficacy.

We have to absolutely focus now on equity and access. We cannot have a situation where people who need the drug don't get it and people who don't need the drug do. We must find ways to ensure we can scale up production of any drugs that prove effective and we can ensure that those drugs are distributed on the basis of need and the basis of benefit.

WHO is already working on mechanisms by which we can achieve that, working with our partners both in the north and the south.

TJ Thank you very much. This was Anna-Maria [Unclear] who is a unit head, research and development blueprint with our emergency programme. Let's try - Chris one more time - Thomas from Bloomberg before we finish for today. Thomas, can you hear us?

[Inaudible]

Thomas, we will have to leave it then for tomorrow. We will conclude for today. Thanks, everyone, for watching us. We will have an audio file and transcript and maybe Dr Tedros will tell us; when do we see each other again?

TAG See you on Monday; bon week-end.