# COVID-19

## Virtual Press conference

## 3 June 2020

### Speaker key:

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|---|---|
| TJ | Tarik Jasarevic |
| TAG | Dr Tedros Adhanom Ghebreyesus |
| TR | Translators |
| MR | Dr Michael Ryan |
| SS | Dr Soumya Swaminathan |
| LA | Lara |
| TA | Tami |
| MK | Dr Maria Van Kerkhove |
| AN | Ankit |
| RI | Ricardo |
| EL | Elena |
| GR | Gracie |
| JE | Jeremy |

**00:00:00**

TJ Hello, everyone, from WHO headquarters here in Geneva. It's June 3rd. My name is Tarik and we welcome you for the regular press conference on COVID-19. Welcome to everyone watching us on a number of our social media platforms and to all journalists who are watching us on Zoom, who can click raise hand and they will be able to ask a question later. We thank our interpreters, who are here with us today and who help us to have simultaneous interpretation in six UN languages plus Portuguese and Hindi.

Journalists who are on Zoom can ask questions in six UN languages and the Zoom [sic]. We have with us today Dr Tedros, WHO Director-General, Dr Maria Van Kerkhove, Dr Mike Ryan and

Dr Soumya Swaminathan, our Chief Scientist. I will give the floor to Dr Tedros for his opening remarks.

TAG Thank you. Thank you, Tarik. Good morning, good afternoon and good evening. WHO is continuing to respond to the new Ebola outbreak in the city of Mbandaka in the Equateur province of the Democratic Republic of the Congo. So far eight cases have been detected. Four of those have died. Another four are receiving care.

**00:01:39**

To be clear, this outbreak is in the same area as a previous outbreak in 2018, which was stopped in just three months. However it's on the other side of the country to the Ebola outbreak that WHO and partners have been fighting for almost two years in the provinces of North Kivu and Ituru in eastern DRC.

The latest person confirmed with Ebola attended the burial of one of the first cases but was detected in Bikoro, 150km away from Mbandaka. This means that two health zones are now affected. Today almost 50 responders from Who and partners arrived in Mbandaka plus 3,600 doses of Ebola vaccine and 2,000 cartridges for lab testing.

The Government is now sequencing the virus to see whether or not it's related to a previous outbreak. This is an important reminder that even as WHO focuses on responding to the COVID-19 pandemic we continue to monitor and respond to many other health emergencies.

More than 100,000 cases of COVID-19 have been reported to WHO for each of the past five days. The Americas continues to account for the most cases. For several weeks the number of cases reported each day in the Americas has been more than the rest of the world put together.

**00:03:23**

We're especially worried about Central and South America, where many countries are witnessing accelerating epidemics. We also see increasing numbers of cases in the eastern Mediterranean, south-east Asia and Africa, although the numbers are much smaller.

Meanwhile the number of cases in Europe continues to decline. Yesterday saw the fewest cases reported in Europe since 22nd March. WHO continues to work through our regional and country

offices to monitor the pandemic, to support countries to respond and to adapt our guidance for every situation.

WHO continues to provide the world with new and updated technical guidance based on the most up-to-date evidence. Just in the past week WHO has released a new case report form for suspected cases of multi-system inflammatory syndrome in children, operational guidance on maintaining essential health services, guidance on controlling the spread of COVID-19 at ground crossings, planning recommendations for mass gatherings, a protocol for surveillance of infections among health workers, ethical considerations for the use of digital technologies in tracking COVID-19 and updated guidelines on the clinical management of patients with COVID-19.

**00:05:04**

This is an update of the guideline we published in March. It includes a COVID-19 care pathway which describes the steps followed by a patient from screening to discharge to ensure delivery of safe and quality care while stopping onward transmission.

WHO continues to train millions of health workers all over the world to apply our guidance. Our openwho.org online learning platform has now registered three million enrolments for our courses on COVID-19 and we have added two new courses, one on decontamination and sterilisation of medical devices and another on environmental cleaning and disinfection.

In total we're now offering 12 courses in 27 languages. In the past week we launched COVID-19 courses in Amharic, Arabic, French, Hausa, Macedonian, Odia, Spanish and Vietnamese.

As you know, last week the executive group of the Solidarity trial decided to implement a temporary pause of the hydroxychloroquine arm of the trial because of concerns raised about the safety of the drug.

**00:06:41**

This decision was taken as a precaution while the safety data were reviewed. The data safety and monitoring committee of the Solidarity trial has been reviewing the data. On the basis of the available mortality data the members of the committee recommended that there are no reasons to modify the trial protocol.

The executive group received this recommendation and endorsed the continuation of all arms of the Solidarity trial

including hydroxychloroquine. The executive group will communicate with the principal investigators in the trial about resuming the hydroxychloroquine arm of the trial.

The data safety and monitoring committee will continue to closely monitor the safety of all therapeutics being tested in the Solidarity trial. So far more than 3,500 patients have been recruited in 35 countries. WHO is committed to accelerating the development of effective therapeutics, vaccines and diagnostics as part of our commitment to serving the world with science, solutions and solidarity. I thank you.

**00:08:04**

TJ Thank you very much, Dr Tedros, for these opening remarks. We will proceed with the questions. I would ask journalists to be brief, concise and to have only one question so we can take as many as possible. To remind you, you can ask questions in six UN languages and Portuguese if that is easier for you. If we are okay we will start with a reporter from Saudi Arabia. We have Mohammed Al Haydar online from Riyadh news agency. Mohammed, can you hear us?

TR Good afternoon, ladies and gentlemen. Can you hear me?

TJ Yes.

TR Good day, good afternoon. Thank you for giving me the opportunity to take the floor and to pose questions. My question is to do with hydroxychloroquine. Certain countries have stopped the use of this medicine and we have seen a rise in cases, in particular in intensive care units and also in terms of the number of deaths.

The are certain countries that continue to use this medicine and these countries have seen improvements. So what can you say with regard to this contradiction? Thank you.

**00:09:57**

MR Maybe I can start and Dr Soumya can supplement. I think, while I respect the spirit of your question, we need to be very careful in making associations like you've just made because to assume that the use or not of a drug in general in a country is resulting in increases or decreases of cases is not something that one can do, quite frankly.

What we have done as WHO and many other researchers around the world and national authorities have done is put in place randomised control trials in order to test which drugs are

effective and which drugs actually help patients and save lives. We thank all our partners around the world who are participating in Solidarity trials but there are other Recovery trials and other Discovery trials happening right around the world to look at what are the most effective drugs in use right now against COVID-19.

With regard to the specific issue of hydroxychloroquine in this trial, Soumya may wish to add more detail regarding that.

SS Just to add to what Mike said, as of now there's no evidence that any drug actually reduces the mortality in patients who have COVID-19 and in fact it's an urgent priority for all of us to do the needed studies, to do the randomised clinical trials in order to get that evidence as quickly as possible.

**00:11:35**

So WHO's very much in favour of and encourages the continuation of randomised trials that are looking at different drugs to reduce mortality but also to reduce the severity of the illness and these are the big public health questions that we are trying to answer.

Again to repeat what we've been saying all along, observational studies have limitations. You can do analyses but there are so many potential biases in the way that patients are managed in a regular clinical setting that the only way to get definitive answers is to do well-conducted randomised trials.

It's particularly important in emergency settings to do these because that's the only way to find out what really are those drugs or those strategies that will reduce death, that will reduce illness, that will reduce infection rates in communities and we should be guided by the science and by the evidence.

TJ Many thanks for this. Now we will go to Brazil, to Lara Pinheiro from Global. Lara.

**00:12:54**

LA Hello, can you hear me?

TJ Yes.

LA Good afternoon. Thank you for taking my question. My question's actually about the new drug which Russia claims they have... which Russia approves to treat COVID-19 and they claimed it was effective against it. But I want to know what the current position of WHO is.

Also they said that the number of patients tested for it were 330 people. I wanted to know if this was a big enough sample to test a drug's effectiveness. Thank you.

SS We have received information that avifavir, which is similar to favifefavir [?], has been tested and that the drug that's been created by the Russian direct investment fund in conjunction with the Chemical Diversity Research Institute will be provided in Russian hospitals very soon.

It's been developed and tested in clinical trials in Russia and we would very much like to see and would be keen to see the results of those trials and are eager to know if there are drugs that are effective and safe for the use of COVID-19 patients. Maybe Maria or Mike might like to add something. That's the information that we have at the moment.

**00:14:32**

TJ Thank you, Dr Swaminathan. The next question comes from All Africa News and we have Tami online. Hello, Tami. Would you be able to unmute yourself, please?

TA Hello, yes.

TJ Yes, it's okay now, we can hear you.

TA Among the many reasons that you are trying so many therapies for COVID-19 including hydroxychloroquine if it can be done safely and are counselling caution in lifting lock-downs too quickly is one a danger that the more the virus spreads the greater the likelihood that it could [inaudible] become more dangerous?

TJ Tami, can you repeat the question? You got broken at the end of your question.

TA Yes, sorry. You heard the first of the [inaudible].

TJ Tami, I'm afraid we lost you. Are you still with us?

**00:15:54**

TA I am with you. Can you hear me?

TJ Now we can. Let's try one more time. Please, just the final part of your question.

TA Okay, the last part is, is among the reasons that you're doing all the things you're doing the danger that the more the virus spreads the greater the likelihood that it could mutate and that might make it more dangerous, is that a concern behind the

many therapies you're trying and things and the advice that you're giving on various levels?

TJ Thank you very much, Tami. We finally got the question.

MK Thank you, Tami, for the question. I'll start and perhaps others would like to supplement. The first part of your question around the more the virus spreads is there more of a chance that it could mutate; we've been discussing here at these pressers that there're a large number of scientists and virologists who are looking at full-genome sequences of the virus that are available, that are being shared by countries all over the world.

There are more than 40,000 full genome sequences that are available. Some of those are available on GISAID and some of those are available on other platforms in which scientists are looking to see, are there changes in the virus. As it is a coronavirus, it is an RNA virus there are normal changes in this virus that one would expect over time.

**00:17:17**

None of these changes so far indicate that the virus itself is changing in terms of its ability to transmit or to cause more severe disease but there are many people who are looking at this and are looking at the fine details of the sequence itself to follow up and to discuss whether or not any of these changes can reflect a change in its behaviour.

But I do think an important point not related to the sequence in your question about, with the more time that this virus circulates can it become more dangerous; I think part of that answer is yes because people grow tired. It's very difficult to keep up all of these measures and we must remain strong and vigilant to have governments fully engaged and people fully engaged as these lock-downs are lifted.

That has to be done in a slow way and in some situations these public health and social measures may need to be reintroduced again and that may frustrate people, which is completely understandable. That in a sense could make the virus more dangerous because people become complacent and it's important that no-one becomes complacent.

**00:18:26**

This is far from over and we must continue to practise the hand hygiene and the respiratory etiquette, the physical distancing, listening to our leaders in terms of the measures that they have

put in place, stay home if you're unwell. Those are the types of measures that must remain in place.

It's just more of a caution that it could become dangerous if we become complacent but the virus itself is relatively stable. There are changes that are expected but they aren't mutating in a way that makes the virus more transmissible or more severe.

MR I'd just supplement because Dr Tedros, sitting beside me here, has been saying again and again and again that this is a dangerous, dangerous virus. It is dangerous enough as it is and that's why we're fighting it. All viruses evolve. They can evolve in one direction; they can evolve in the other direction. RNA viruses do mutate more quickly or evolve more quickly because unlike us humans who live with DNA that corrects itself - our cold can correct itself - RNA viruses don't have that natural error-checking that goes on and that gives them a disadvantage and an advantage.

**00:19:48**

The disadvantage is they make a lot of mistakes and many of the viruses don't thrive or survive but very occasionally a mutation can lead to a virus becoming more effective in transmission or more virulent or less effective in transmission. In general in human infection viruses tend to evolve to live with humans rather than do more damage.

That would be a general process of viral adaptation because it's not in the virus' interests to do too much damage in the host. It wants to survive. Having said that, as Maria said, the world's virologists are tracking this virus on a daily basis. To date to my knowledge we haven't seen any particular signals in the virus' behaviour or in its sequence that would lead us to believe that the virus is changing in its nature, has changed in its transmission dynamics or changed in its lethality or virulence, as a virologist would call it.

**00:20:49**

So in that sense no, we're not seeing that but we are tracking that, it's an important issue, as Maria said but this is already a dangerous virus. We have been saying that consistently for months now.

TJ Thanks. We will go now to Mexico and Paulina Alcazar from Encadena. Paulina.

TR Can you hear me? Thank you. In Cancun we are already, as we said last week, following recommendations and opening up

and I wondered, being out in the open, in natural areas - Cancun, Tulum and so on - will that stop the spread of the virus?

MR I can begin and Maria can follow. I think this virus spreads from person to person by the droplet or respiratory route or often by the contamination of surfaces by someone who has symptoms or someone who's shedding the virus so in that sense being out in the open is a very good thing; being out in the open air is a very good thing. It's good for one's general health and I think it's good for avoiding infection as well.

As long as you're not out in the open with thousands of other people crowded together then yes, it's a good thing in general for health and so we can only encourage people in the right circumstances that that happens.

**00:22:36**

As countries open up we've seen more and more parks and other amenities have been opened to people but I think it is important that you listen to local authorities. They have to manage these public spaces and they're precious public spaces but they also have to keep those public spaces safe and allow people to mix in a safe way.

So yes, we should be using nature to heal ourselves and to heal our communities but we also need to abide by the public health advice that authorities give for the use of those amenities.

TJ Thanks. We'll go to India Today now. We have Ankit with us. Hello, Ankit.

AN Good evening. What do you have to say on the AP report published which cited internal WHO recordings and claimed that in your own view China delayed providing the details to the WHO by at least two weeks? Is the report factual and what is your response to this? Thank you.

MR Our leadership and staff have worked night and day in compliance with the organisation's rules, regulations to support and share information with our member states equally and engage in frank and forthright conversations with governments at all levels. That's what I would like to say.

**00:24:04**

TJ Thank you very much, Dr Ryan, for this. Let's try to have Isabel from EFE news agency. Isabel.

TR Thank you. My question is, why is the situation so bad in South America and in Central America in spite of the fact that

many of the countries in the region have taken measures and taken them very early, including strict lock-downs?

A related question; as far as we know about the behaviour of the virus in other parts of the world, what would you recommend to Latin American governments to stop the spread of the virus?

MR I can being. I think first of all when we look at Latin America in general and the Americas in general it's important to distinguish that, as happened in Europe, as happened in south-east Asia, the epidemic is not at the same stage of development in each and every country.

The small island states in the Caribbean have done a superb job in containing the virus and in stopping disease and in saving lives but we are very concerned about Haiti at the moment because of its unique circumstance, its unique fragility and the fact that the disease is accelerating in a highly vulnerable population.

**00:25:44**

I think you can say the same in each sub-region for Central America similarly; we are concerned about the disease situation in places like Nicaragua. However we're seeing a different scenario in other countries.

Similarly in South America we see increasing, continued, intense community transmission in places like Peru and Brazil and in other countries. We might have said the same thing a number of weeks ago in Europe or in North America or other places; why is the situation so bad?

The epidemic has developed in each and every region or subregion in a slightly different way but what has been common to many regions has been intense community transmission. It is clear that once that intense community transmission has been established it's very difficult to root the virus out and it takes a comprehensive strategy, not just public health and social measures.

**00:26:43**

It requires to have a highly involved and empowered community; it requires strong co-ordination and governance at government level; it requires an all-of-society approach; it requires sustained commitment. Even in those situations you see particular settings in which the disease can take off and cause a tremendous amount of suffering and death.

We see that scenario in Europe and in North America in long-term care facilities. We've seen that emerge in closed settings, in detention centres, in others so there are particular settings in which the disease can amplify and cause more difficulties.

We have been saying again and advising since the beginning of this global epidemic that it's this ability to implement a whole series of measures across society that allows a country to bring a disease under control, continue to suppress the virus and ultimately exit all of these measures.

We've seen many, many, many good examples of that and it's not that every country has done the same thing. What's been remarkable in this is that countries have done slightly different things according to their context but what countries that have been successful have done is they've taken all of those measures; they've been very, very serious about community engagement, they've been very, very serious about educating people and bringing the community along with them, they've been clear in their communications, they've let the response be driven by science.

**00:28:20**

They have implemented and tried to sustain surveillance and finding the virus at all times during the response even though it's very, very difficult when you have very intense transmission. They have focused on targeting their public health and social measures and sustaining those measures and only lifting those measures when they see indications that they're making progress.

It's not one thing or another so in terms of advising countries in Central and South America it's about persistent, it's about consistency, it's about making sure that your messages are clear, making sure your community is on board and ensuring that you're driven by science, driven by the evidence.

That evidence is global in the sense that there are global facts and global knowledge but it's also local. There's a local context and there's local learning so we need to adapt global knowledge but we need to implement with local knowledge as well.

**00:29:19**

I think countries that have matched the global science with their local knowledge and been consistent and persistent in that are the ones that have had success. There is no absolute recipe for

success, there is no SOP, there is no algorithm that gives you success against this virus.

It is a complex set of actions implemented by responsible governments driven by science who are prepared to sustain their action for as long as it takes to suppress and stop this virus.

MK If I might add just to supplement what Mike has just said, many countries in other parts of the world are exactly where countries in Latin America are right now in seeing some very intense transmission and outbreaks and we can learn from them and we can learn from each other.

What we've seen in many countries where the situation just seemed overwhelming, where it was unclear where exactly the virus was, it just seems like it's everywhere; what we've seen many countries do is target their efforts and prioritise their efforts to find out where's the highest concentration of this virus, where's the highest concentration of the virus itself circulating.

**00:30:36**

What we know about this virus is that it likes close contact with people and when the public health workforce and a testing strategy focuses on closed settings and vulnerable people and you start testing those appropriately and you use your limited supplies and limited workforce in targeted areas you can start to see the boundaries of where that outbreak actually is.

That really helps focus all of the efforts for the contact tracers, for your testing strategy, mobilising your clinical care facilities to care for individuals and it helps narrow down the problem bit-by-bit. Tackling this virus at the lowest administrative level you can is helpful. Looking at it at the national level is one thing and having a strong national plan but implementing these efforts at the lowest administrative level will be helpful to help you find where the virus is and target what you need to do.

Another way countries have tried to tackle overwhelming epidemics is to focus on vulnerable workers, vulnerable people. These are our front-line workers, these are healthcare workers and in Latin America and in many countries across the globe we see an alarming number of healthcare infections and an alarming number of healthcare deaths.

**00:31:55**

So prioritising testing there will help you see where the virus is and who's getting infected. Looking at your older populations, looking at people with underlying medical conditions so that they

are prioritised for care, so that you can ensure that those individuals do not develop severe disease and die.

And as Mike said, adapting your efforts to the situation, to the context where you live and to do that at the lowest administrative level you can can help break down the problem. Looking at it at a national level is important but targeting those efforts at the lowest administrative level you can can help break down the problem and start to tackle it bit-by-bit.

TJ We will now go to Swiss Public Television, Italian section. We have Ricardo Baniato with us. Ricardo, can you hear us?

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

TJ Yes.

RI Great. Thank you very much. Thank you, Mr Ryan, for reading the statement about reportage about the inquiry of AP, Associated Press but still a question; do you confirm the quotes appearing in this enquiry, according to this inquiry, your quotes and Mrs Kerkhove's quotes?

**00:33:17**

For the Director-General please, do you confirm that China delayed releasing coronavirus info, as written in this inquiry?

TJ Thank you, Ricardo. I think Dr Ryan already answered this question so unless there is something else that our speakers would like to add we will move to the next question. We have Elena Sanchez from EU Observer. Helena, can you hear us? Can you unmute yourself, Elena?

EL Can you hear me?

TJ Yes, now it's okay.

EL Actually it's a follow-up on the question my colleague just asked. I don't want a confirmation exactly on the topic but I was wondering more how these kinds of reports can affect the relationship between China and the WHO.

TJ I think the answer will be just the same as to our friend, Ricardo, from Swiss TV, that Dr Ryan has made a statement on this particular topic so unless there is something else to add we will move to Health Policy Watch. We have Gracie online. Gracie.

**00:34:44**

GR Yes, can you hear me?

TJ Yes.

GR Hi. Thank you so much for taking my question. I have a question regarding the recommendations for the public use of facial coverings. The SAGE infectious hazards group released recommendations saying that basically facial coverings... supporting the use of facial coverings by the general public, especially for public transportation or just conducting daily tasks outside.

I was wondering if the WHO has been updating official guidance on mask use to follow those recommendations. Thank you very much.

MK Thank you very much for that question. Yes, indeed, the StAGH, the Strategic Advisory Group for Infectious Hazards, did release some notes from a meeting they had and we are planning to update and release new guidance on the advice of the use of masks in the coming days.

**00:35:48**

But just to outline, WHO works with a large number of groups including the StAGH as well as global expert networks and guideline development committees and civil societies to evaluate all available literature on a variety of topics including the use of masks.

But I think what is important is from our April 6th guidance what we did put out and what we continue to say is that masks alone are not enough. Masks must be used as part of a comprehensive strategy for COVID-19 including all of these public health measures; test, treat, isolate, trace and quarantine contacts; all of these measures.

In our April 6th guidance what we did was outline a number of situations and support for decision-makers in taking decisions about how and where masks could potentially be used. In that guidance we outlined areas and settings where for example physical distancing couldn't be achieved and a mask could be considered.

So we are seeing a number of countries across the world now adopting that and indeed using our guidance and making decision to say in situations where we can't do these public health measures and we can't do physical distancing a mask would be useful.

**00:37:05**

So we're trying to track that to see with masks but with all of the interventions that countries are using and how this is adopted at

the national and indeed the subnational level but we will be issuing guidance in the coming days.

MR Just to add in that context and to confirm what Maria said, we have said in this presser on a number of occasions and we would fully support countries implementing broader use of masks in specific contexts as part of a comprehensive strategy.

Our concerns were using masks as an alternative to all of the other measures. Masks should be additive to the risk management process. There's no zero risk unfortunately in this fight against COVID-19. We're all experiencing that as we move back to work, we move back to school. Everyone is concerned; what are the risks, how can I reduce risk, how can I manage the risk to me or my family?

We see masks as part of that continuum of risk management, not as an alternative to public health intervention, not as an alternative to physical distancing, not as an alternative to surveillance, not as an alternative to lock-downs but as part of a comprehensive evidence-driven strategy to be able to rebuild our economies and rebuild our societal interactions.

**00:38:27**

Then with specific reference to the use of face coverings at general population level - Maria's right and the team will be issuing updated guidelines across a range of issues related to masks, not just community use of masks but, I also think, masks in other settings.

But with regard to the use of masks at community level they would mainly be used for the purposes of source control, in other words for people who may be infectious reducing the chances that they will infect someone else. I would again reiterate that if someone is sick, if someone is symptomatic they should be at home or they should be in a medical care facility.

Therefore we need to be really, really careful with the use of masks for source control. There are always cases in which someone is unaware of their symptoms and then the use of masks for source control could be a useful additive but it is not an alternative - and we say it again - it is not an alternative.

**00:39:23**

Symptomatic individuals moving about within our communities is not good thing and masks are not an adequate way of managing that risk. An adequate way of managing that risk is supporting that symptomatic person with adequate care, ensuring we

identify all of their contacts, that their contacts quarantine for 14 days and are supported in that quarantine.

In that context that is the primary and best way to manage this, as Maria said, to break the chains of transmission. Masks are a potentially important adjunct and many countries are using that in a very, very measured and a very, very credible and a very, very responsible way. I think our guidance will reflect that responsible use.

TJ Thanks, Dr Ryan. Let's go to the next question. We have Jeremy from RFI. Jeremy.

JE Can you hear me?

TJ Yes.

JE All right. Thank you so much for taking my questions. Hello to everyone. I will ask my question in French if I may.

**00:40:28**

TR Following your announcement about hydroxychloroquine and the fact that you are reintegrating it into the Solidarity trials is that an approval of hydroxychloroquine? Does that mean it's not dangerous? Does that mean that WHO in the next few days may actually decide to exclude it again, in the next couple of days?

SS I think we have to be very careful about how we describe these decisions. When we announced last week that we were temporarily suspending enrolment into the hydroxychloroquine arm of the Solidarity trial it was based on some reports of increased mortality that was described in a large group of patients; increased mortality among those taking hydroxychloroquine compared to those who were not.

So the committee took the decision to protect the safety of the trial participants with abundant caution while we looked at our own data and while other ongoing trials of hydroxychloroquine like Recovery in the UK looked at their data, which is a fairly substantial data set of over 11,000 patients.

**00:41:50**

We are now fairly confident, not having seen any differences in mortality - the data safety monitoring committees of both Solidarity and Recovery have recommended that the trial can continue.

We're still talking about a clinical trial that's testing this drug for its efficacy and safety among patients who are hospitalised with COVID infection. We make recommendations for the routine use of a drug based on evidence. We have a process, we set up a guideline development group, it reviews all the evidence, systematic reviews are done of both randomised trials and other kinds of evidence that are available.

Based on all of that WHO then recommends the use of a drug or a strategy for a particular disease. This is the standard process and so decisions taken about a trial are driven by what's happening within that trial and there are committees like the data safety monitoring committee and oversight bodies like the data safety monitoring committee or oversight bodies like a steering committee that advise what should be done for that particular trial.

That's very different from making a recommendation for the use of hydroxychloroquine or any other drug for either treatment or for prevention.

**00:43:11**

So, as we said, we hope that the ongoing trials will continue until we have definitive answers because that's what the world needs today. We owe to the patients to have a definitive answer on whether a drug works or doesn't work and that can only be done through well-conducted randomised trials so we encourage the other trials to continue, of course each of them being monitored by their own committees for safety periodically and that's what we will do.

It's possible that in the future we make other changes in the trial. That's why it was set up as an adaptive trial design so that we can add arms and drop arms but all of that is done based on very careful examination of the data and the evidence.

TJ Many thanks. We've got time for one, maximum two questions so let's try to get Gabriela Sotomayor. Gabriela, can you hear us? Please click unmute. A little bit of echo but we can hear you. Please go ahead.

**00:44:33**

TR Can you hear me okay?

TJ Yes.

TR Thank you very much indeed. Talking about the situation in Latin America - and I'm thinking about Mexico in particular and

there is a high mortality rate in places like Mexico City - my question for you is, do you think that environmental pollution, which is very high in some cities in our country, may have an impact on the spread of COVID-19 and on the illness in patients?

Do you think that high doses of vitamin D and vitamin C could help to strengthen people's immune systems so that they could resist the illness more effectively? Perhaps you could comment on that. Thank you very much indeed.

MR On the issue of vitamins, I don't believe there's any specific evidence that vitamins prevent or can treat COVID-19. However there are many things that we can do to keep our bodies healthy and allow us to deal with any infectious disease in a more effective way so a healthy diet and sometimes supplementing those diets with appropriate vitamins is a very positive way to keep oneself healthy.

**00:46:08**

But I do not think it's possible to say that any particular vitamin concoction or any other for that matter is associated with better outcomes in COVID-19. However I'm sure we can refer... We're tracking so many different studies around the world at the moment on the use of specific therapies but I'm not aware of vitamins being used as a supplemental therapy in any of the trials that are currently underway but we can check that.

With regard to air quality again I think it's difficult to make associations. There's no question that poor air quality is associated with chronic lung disease and chronic obstructive pulmonary disorders and we do know that people with underlying chronic conditions of the respiratory system and heart and cardiovascular system have higher mortality rates in this.

So it's logical to assume that if someone already has damaged lungs from severe outdoor or indoor air pollution it is logical to assume that they will be more affected by this virus, especially if they become clinically unwell.

I'm not aware - and Maria may correct me on this - of any specific studies that associated air pollution with worse outcomes but it's a very interesting avenue of study and we do know that certainly indoor air pollution is associated with much higher rates of respiratory disease in children and sometimes worse outcomes.

**00:47:38**

So there's no question that air pollution plays a role in both the incidence and severity of severe acute respiratory diseases. I'm

just not quite sure whether this has been proven in the case of COVID-19. Maria.

MK It hasn't yet but it doesn't mean that those studies aren't underway. I'm not aware of studies specifically looking at pollution but I do want to add to what Mike has said, we have seen quite substantial reduction of pollution during this pandemic with the reduction in people's movement.

We've all seen images of the sky in certain cities that have been quite heavily polluted and it comes back to something the Director-General has said previously and WHO has been saying; not only do we build back better but we build back greener and there's an opportunity here to use this time to not only help our public health infrastructure and work on universal health coverage but also to have a safer environment.

**00:48:39**

Because, as Mike has said, people with underlying conditions, especially people with chronic cardiovascular disease and chronic respiratory disease do have a proven higher risk of developing severe disease and death associated with COVID-19.

So that is something we do know and anything that puts people at an increased risk of developing those chronic conditions will put them at an increased risk for severe COVID-19 disease.

TJ Thank you. I think we will conclude here. We will have an audio file available as well as a transcript. We also sent you a number of news releases, feature stories on different topics not only from the headquarters but also from our regional offices as well as an invitation for the press conferences that are held by our different regional offices so you're welcome to listen to that as well.

From my side I wish you a very nice day and evening.

TAG Thank you. Thank you, Tarik, and thank you all for joining. Thank you so much.

**00:49:53**