Transcript of virtual press conference with Gregory Hartl, WHO Spokesperson for Epidemic and Pandemic Diseases, and Dr Keiji Fukuda, Assistant Director-General ad Interim for Health Security and Environment, World Health Organization

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Gregory Hartl: Welcome to the WHO's daily press briefing from today, Thursday 14 May 17:00 o'clock Geneva. Before I hand over to Dr Keiji Fukuda, I would like to do a couple of regular house keeping and one not so regular house keeping item, please. What is new is to let you know that today's virtual briefing will be the last virtual briefing for more or less a week. We will let you know when the next one is, but our Governing Body Meetings start tomorrow and consequently, we are suspending these virtual briefings for a period of time. However, we will be back, at the latest shortly after the World Health Assembly is over. With that, I would now like to hand over to Dr Keiji Fukuda, Assistant Director-General for Health Security and Environment.

Dr Keiji Fukuda: Welcome to the press briefing. As usual what I will do is give a quick overview of where we are in terms of the epidemiology, and then I will go into one or two issues, and then throw it open for any questions that anybody has. In terms of the numbers that we have received, the laboratory confirmed cases officially reported to WHO as of 8:30 this morning, we stand at 6497 laboratory confirmed cases. This is up from 769 more cases than yesterday, at about the same time, and this includes 65 people who have died from this infection and these cases have been reported from a total of 33 countries.

As it has been true from the beginning, the most cases have been reported from North America, with currently the United States reporting the most cases at 3552, Mexico reporting 2446 cases, and Canada reporting 389 cases. We continue to be at the pandemic alert Phase 5, we continue to be looking for evidence whether we have to move into Phase 6, but so far that has not occurred. In terms of the other countries – similar to the past few weeks – the other cases being seen in other regions and other countries are those cases associated with travel and then for people either being in contact with travellers, or perhaps household members, or outbreaks in places such as schools. So pretty much what we have been talking about for the last several days.

The issue I wanted to talk about in a little bit more in-depth today was something that we touched upon a few days ago and I just want to talk about it a little bit more today. One of the interesting things about this whole situation is that the amount of information available on what is unfolding is really probably unprecedented. There is more information available about the epidemiology, about the viruses, than has ever been true certainly for a global outbreak like this. As part of that push to get the information out, the gene sequencing information has been much more quickly available on these viruses than in any comparable event.

Over the weekend, WHO was contacted by a credible scientist, a credible virologist who indicated to WHO on Saturday that he thought, in his analyses of the gene sequences available, that potentially the viruses that were circulating were from a laboratory-derived virus. This was a hypothesis raised by the scientist and provided to WHO on Saturday, and this is not a scientist who is actually working with the influenza viruses. This is somebody who is able to go to the databases and take a look at the sequences available and, on his own analyses, come up with this hypothesis.

Because of the nature of the hypothesis and because of the credible nature of the scientist, we took this very seriously. Over the weekend, one of the first steps we did was to contact our Collaborating Centres. As you know we have WHO Influenza Collaborating Centres located in five cities. One of the first things that we did was to discuss the hypothesis and the evidence provided by the scientist, and ask them to take a look at that. However, because we are dealing with an influenza virus that is new, which origins are from swine, then what we did also on the next day was to contact FAO and OIE. FAO and OIE are sister organizations that have responsibility for the health of animals. They also maintain a large reference network of laboratories, and this goes under the name of AFLU. On the following Monday, what we did was then have a larger discussion with the larger group of virologists. These are animal influenza virologists plus human influenza virologists and there was a discussion. We asked them to look at the evidence and then to provide their opinion to us, was this a credible hypothesis or not.

This is a process that we have been going through over the last several days this week, and based on that evaluation by all of the laboratories, the conclusion is that this group of scientists feels that the hypothesis does not really stand up to scrutiny. In fact, the evidence suggests that this is a naturally-occurring virus and not a laboratory-derived virus. The paper that the first scientist brought up will be coming out. I think that the paper has not yet been posted and so we will have to see what the final form of the paper says and whether there is any additional information or so on.

The reason why I bring this up is because I think it is another example of what making information highly available allows to be done. This is a really interesting example where somebody, who is not directly involved with the investigations, is able to independently look at the information, making independent assessment, and then that same process which allowed this person to make the independent assessment, was then used to look at the hypothesis generated. In this instance, a scientist feels that there may be something unusual about the virus. We were then able to take other scientists with the same information, have it looked at, and looked at perhaps in more in-depth. And based on that process, the other group of scientists felt that the original hypothesis did not stand up to scrutiny.

This is really how the scientific process works and this is how the scientific process can work in the context of this kind of public health emergency. It is a really I think a nice example of what should be done. Other people looking at something, raising points, raising criticisms, and then the same process being used to address those directly. That was one of the more interesting uses of this kind of information in a real world example of what making information widely available can do. Hopefully, we will see this process applied over and over in additional investigations, in additional outbreaks as they come up.

The second point I wanted to address was in looking at some of the reports and in fielding some of the questions that we have had from media, I think there is a little bit of confusion about the antivirals. I just want to make two main points here:

1) WHO is not making any changes in its recommendations about antiviral use, and

2) there is confusion about whether we were seeing resistance in these new influenza A H1N1 viruses and we are not seeing any increased resistance.

Of course, we always remain concerned about the possibility of that. These viruses, like any other pathogens can develop that property, but we have not seen it and so it is something like many other aspects of this phenomenon that we will keep watching for. But we do not see it right now. With that I think brief coverage, let me just throw it open for questions.

Alan Milander, Excelsior Newspaper: It is probably an old question but still. You have said that there is still no evidence to say that the world is ready to go into a Phase 6. Yet there have been some reports, for instance from Brazil – and I know that Brazil is still in the same area, in the same region as Mexico and the United States – that there is transition from person to person. What exactly is the level of transmission that is needed, from person to person, in order to consider going to the next Phase?

Dr Fukuda: What we are looking for as information and as evidence to go from Phase 5 to Phase 6 is clear evidence that we are seeing what we consider to be sustained-community level, person-to-person transmission. So, for example, we know already that this virus can pass from person to person, that is very clear, but what we are looking for is evidence that in a country outside of North America, that in another region, the virus has established itself so that it is circulating in communities and infecting people, not just associated with travel, not just in one or two schools, something like that. The proof of the pudding, what we are looking for, is people who are getting infected who cannot be traced to anybody known to have an infection. Currently, many of the people who have not travelled we know have been in contact with the travellers returned. However, if we begin to see numbers of people who are getting infected, who have not had any contact with such persons, then this really becomes much stronger evidence that we are seeing community-to-community spread. Brazil is part of the Americas and we really are looking for this kind of pattern outside of the Americas, perhaps in Europe, perhaps in Asia, perhaps somewhere else in the Middle East or so, but outside of the Americas.

Helen Branswell: My question is one that probably you have been asked before, but I think it is one of those things that we need to revisit from time to time. The numbers continue to go up and yet we have not gone from 5 to 6. I am just wondering, out in the wider world, people are not as worried about this virus as they were a few weeks ago. I am wondering if you could tell me whether WHO is as worried, more worried, less worried than it was when we moved from 3 to 4 and 4 to 5.

Dr Fukuda: Certainly the global numbers have increased a lot. If you plot them up, you will see that it is almost a straight line with cases increasing, but the vast majority of those cases have been reported from the United States and Mexico, and these are areas in which we very clearly can see community spread. There is a wide geographical dispersion of these viruses in community activity, and the majority of the increase in numbers is still coming from those regions. In terms of the level of worry at WHO, I think that we are very similar to where we were at the beginning. At the beginning we made the point over and over again, we knew that it was a phenomenon that really required close monitoring, We know what passed pandemics have done, we know this is a new influenza virus, and we know that we are few weeks into this situation and we do not quite see what the future is going to bring. We do not know what the pattern of it will be if it continues to spread, we do not know what the pattern will be in the southern hemisphere, if it goes into Africa, and we do not know what changes will occur over time. Since we have seen changes occur over time in other pandemics and since we have seen the impact, or the severity of the impact, varying from population to population, since it is so early we know that these are potential changes that we have to monitor very carefully. Our message to everybody is, of course, do not over worry about these things, it is important to know it is serious to monitor and we are

watching it very closely as are the other countries out there. It is something that requires following closely, on the other hand if we see changes in the severity, we will clearly let the world know about that. Whatever changes we see, we will pass that on. To characterize this, it is an event that is serious, that requires close monitoring, but most of the cases at this time continue to be mild cases, where people recover without needing hospitalization although there are some people that do get fatality and serious illnesses.

Jason Gale: Can you comment on the pattern of severe illness that we are seeing in otherwise healthy young adults and how that particular pattern places this event in a different context than seasonal flu for example?

Dr Fukuda: In the beginning a lot of people were characterizing what was going on as seasonal influenza, but in many ways I think that it is a little bit misleading. There are some features about this current phenomenon that are very different with what we see with seasonal influenza. For example, with seasonal influenza, all age groups get infected and in fact younger age groups get infected more often that other age groups. But the complications, the hospitalizations really occurred disproportionally among the elderly and among people who have chronic medical conditions. When you look at deaths for seasonal influenza, approximately 95% of deaths occur in people who are older, people 65 and above. You really see that all of the deaths – most of the deaths – are really concentrated in older people.

What we are seeing here with this new virus is that most of the people who have gotten infected so far are relatively young: they are younger than 60 years of age, the average or median age is somewhere in the 20s. When you look at the people who have died, these are younger people who are dying. Among those people who have died, part or mainly half of them are healthy people who have no predisposing conditions. It is highly unusual for young healthy people to die from influenza. This is a pattern that is different then from what we see with normal influenza. One of the patterns that has been noticed for other pandemics in the 20th century, there were three pandemics in the 20th century, is again that deaths occurred disproportionally more in younger people than they normally do. This appears to be perhaps one of the features of new influenza viruses has they emerge and they sweep around. The pattern of severity, who they affect is a little bit different from what we see with seasonal influenza. These are important differences and these are part of the reason why we take this so seriously. We do see significant and basic differences with how this virus is impacting people.

Donald McNeil, the New York Times: About the report that came in WHO on Saturday that turned out to be an error. How much damage do you feel that it did and given that this happens because gene sequences are posted publically where anybody, good scientists or bad scientists can read them. How do feel about posting sequences of the viruses publically? Do you think it is a good idea or do you think about going back to the old days and keep them privately. How do you feel about it?

Dr Fukuda: I think that, 10 years ago, we would not have been discussing because it would have been a very different situation. I think that when credible hypotheses are raised and they really raise important implications – a virus raised in a laboratory brings up several implications or possibilities – of course it causes our anxiety to go up very high, very fast. It is something that you have to think about and you have to think about: does this change what we are doing? Does this change how we would think about the overall situation? In that sense of course it causes a lot of anxiety and it leads to a lot of work that you maybe would not do if that was not there.

On the other hand we live in a time when there are many different hypotheses, many different rumours, many different accusations, many different theories which are posted on the Web which people bring up in any number of ways. In a sense I do not think this is damaging at all. I think what it shows is that if we have that information it brings up possibilities – and possibilities from very credible people – but it also points out that these possibilities can be addressed and they can be addressed in a really transparent manner.

Here I think is the key to the whole thing. We now live in an age in which it is really not possible to hide things. You know, things have to be looked at in an open way and it is all for the better, as far as we are concerned. It means that things come up that you have to address, maybe it means a little bit more work, but what it means is that you can also address it in a way which is pretty convincing to people. The scientist will publish his paper, it will be looked at by additional scientists – people will debate it and they will also be able to look at the evidence – but this is healthy, this is the way it should be done. This also allowed us to look at it in a very expedited way, go to people that we think are credible – very good scientists both in the animal health world and in the human health world – and address it directly on. This is much better than dealing with rumours in which the basis for the rumour is not clear and then dealing just with answers in which the basis of the answer is not so clear. I think this is the way we want to go.

Frank Jordans, Associated Press: On that point about the theory that was put out that you have now said it unlikely, are you excluding that possibility entirely or are you saying that on the available evidence, so far, it does not appear likely? The second question – follow up on one of my colleagues about whether we should be worried – since you are scaling back your media activity, that would give some people the impression that perhaps there are not going to be any major developments or at least you are not expecting many. Would people be right to feel a little bit calmer about the situation now than they were perhaps two weeks ago? Finally, just a quick word about the vaccines meeting today.

Dr Fukuda: I think that it is fair to say that in the world of science, nothing is ever totally excluded, nothing is ever ended. I think even gravity, thermodynamics, all these things are open for continual revisiting. So what is going to happen is that the paper will come out, there will be some continued debate. I think the real question is: “has it been addressed to a point where it has been sufficiently addressed” that we can feel fairly comfortable that we are not dealing with an unusual situation, and I think that is true. We feel very comfortable based on the analyses which have been done, based on the rigour in which it has been looked at, that we are not dealing with a laboratory-created virus. However, I do not expect that the debate itself will stop. I think that this will continue, but for the purposes of what we need to know in public health, and in terms of responding to this, the discussions and the examinations have been pretty rigorous, pretty good.

In terms of scaling back on media, it is not really “scaling back on media” so much, it is that we are heading into some large meetings. The Intergovernmental Meeting on Virus and Benefit sharing starts tomorrow and this basically involves all Member States, and then this goes on Friday and Saturday and then, beginning on Monday we go into the World Health Assembly. It is really a matter of, it is very hard to spread ourselves all over the place and so it is going to, I don't know, the media plan for large events – or additional large events.

In terms of the vaccine meeting, yes, one of the big issues about this overall situation is: “how do you approach the vaccine situation?” There are seasonal influenza vaccines that are made, there are H5N1 vaccines that have been under development, and then we have this new virus which is spreading around. The question is about, should there be a vaccine made to this new virus, what should you do with the seasonal vaccine viruses, a lot of questions like that, and if there are going to be changes made, then when should changes be

made – now, in a few weeks, in a few months and so on. These are enormously complicated questions and they are not something that anyone can make in a single meeting or just sit around and decide.

The meeting today involved a large number of key players – actually when I came over here, I came directly from that meeting – involved a large number of key players both from industry as well as from the advisory groups to WHO, members of SAGE, members of one of the safety groups and so on. It is actually part of an ongoing discussion to look at what questions have to get addressed, how can you make those decisions, what evidence is there. There will be a series of meetings and this was one of those meetings to look at what kind of evidence is needed to make these kinds of decisions, to make these kinds of recommendations. There will be additional meetings that continue trying to get through all of these questions – so no big decisions, no pronouncements… - but part of this very complicated discussion.

Agence France Press: Just a follow up on the question on the vaccine meeting. Can you tell us when a decision might be made?

Dr Fukuda: There are really a series of steps and a series of decisions that have to be made. For example, the work on developing vaccines started almost from day 1. As we discussed as soon as a virus was identified, work began on turning the virus infecting people into a candidate viruses actively provided to a company, so they can test it out in their processes to see how well they might turn it into a vaccine. That started a few weeks ago and that work continues. Then there are some questions that then will come up which I do not think we have to address yet, because even if we address them, we cannot act upon them.

One of the questions is: "When and if should an A(H1N1) vaccine be made for this new virus?". The reason why we cannot act upon it right now is that you have to have the viruses that can go into the vaccine before anyone can make the vaccine, and even once you give it to the company, they have to be tested and you cannot make the vaccine right away. That technical process itself will require several weeks before you could even start making a vaccine. That work continues and that is independent of any of these discussions.

Then the questions will come up: "Should we make the A(H1N1) vaccine, should we stop seasonal vaccine, should we be making both of them, what kind of combination might be reasonable?" Here, I think that as the A(H1N1) situation unfolds, we will get a better and better handle on what is the severity, what is the impact on people, and it will give us more information to make these difficult decisions. Because what is really going to be wrestled with is that seasonal influenza itself has a significant impact on people. This is not a benign infection, this is an infection that again is estimated to kill some hundreds of thousands of people each year round the world. There is a real trade-off if you just say we are going to stop making that vaccine. On the other hand, as we have discussed, this is a new virus that continues to spread around the world, may continue to evolve and so, if we also feel that this is becoming a really great, having a big health impact on people, you then have to weigh what are the relative benefits of making one vaccine or the other, or what are the relative benefits of making both vaccines. These are the kinds of questions that will be discussed as we go through these meetings and I think it is not possible to say that there will be a decision made by this date. It really is going through, I think, this painstaking and difficult process, but that is what is going on.

Richard Knox, National Public Radio: Could you outline the most important evidence that led to the consensus against the hypothesis of this might have been a lab-created virus? And, secondly, I want to be clear from what you said earlier, even if we do see sustained-

community spread in South America in the coming weeks or months, WHO will not account that as a reason for escalating to Phase 6. Is that right?

Dr Fukuda: Let me address the second part first, then I will come back to your first question. The formal criteria from going from Phase 5 to Phase 6 – call for community-level sustained transmission in at least two different regions, in essence. South America will be part of the PAHO Region for the United States and it will all be part of one region. What we are looking for in order to meet the formal criteria is community-level transmission again in another region, outside of the Americas. Having said that, completely independent of the Phases, of course, if we are seeing a community-level transmission in Brazil or some part of Latin America, this would be an important evolutionary step in the whole thing, and we would be working very closely with the authorities there to try to address that situation. Two separate issues: one about the outbreak itself, and then one about the formality of the Phase change.

In terms of the evidence, some of the points brought up in the information conveyed to us by the scientist was that there appears to be an increase in lysine residues – it gets very technical – the lysine amino acids in the newer virus compared to some other swine viruses. Another point that was brought up is that on the phylogenetic tree, it looked like that this virus was out on a long branch, compared to some other swine viruses next to it. These are highly technical matters, but what is known about influenza viruses is that when you grow them in eggs – not have them reproduced in animals or in people – this can lead to an increase in lysine residues. But human influenza viruses, avian influenza viruses and swine influenza viruses are not the same. After discussion and looking at all the swine influenza viruses, it was concluded that the amount of lysine being seen was in fact very consistent with the natural increase in lysine being seen in swine influenza viruses. In fact, when the swine influenza viruses are put into eggs, you expect to see even more changes than we are seeing in these viruses.

Similarly, when it was looked at the long chain on the phylogenetic tree, it became clear that there are historical gaps in the information available on swine influenza viruses. But many swine influenza viruses are also associated with long branches on the phylogenetic tree, so there is nothing unusual there.

A third point that was brought up is that the potentially evolutionary rate of the genes in the new virus were progressing at a faster rate than other swine influenza viruses. But whenever you say that something is moving faster, it is in comparison to something. When it was looked at what it was actually being compared to, it was actually being compared to genes which in a fact were changing slower than what they normally do. So, again it exaggerated, it made it look that something was moving faster than looking at it in a broader way. It was very technical analyses like these, but looking at them one by one.

And then, in addition, when you look at the new swine influenza virus, what you see is that the genes – even though the grouping of the genes – is different than in other swine influenza viruses. The genes themselves have been seen in a number of other swine influenza viruses, so the genes themselves are not new. We already know from so much experience with influenza viruses that they often mix their genes and this is really felt to be consistent with a natural pattern of the swine influenza viruses. It was on a basis of a number of analyses like that.

Mitamura, NHK: Could you mention about the Intergovernmental Conference which will start from tomorrow? What kind of things would you like to talk with other representatives from the Governments?

Dr Fukuda: The Intergovernmental Meeting (IGM) tomorrow is one part of a series of meetings that has occurred for the last two years or so, in which all the Member States of

WHO in essence have been involved in a discussion about under what conditions should things such as novel influenza viruses – the kind we are talking about now or H5N1 – under what conditions should they be shared and in return, recognizing that there are a large number of countries, largely in developing countries, countries that have less access to resources, that are not often able to have access to many of the benefits that these viruses bring. Some of these benefits would be vaccines, antiviral drugs and so on… and so how can that be made more equitable.

It has been a very broad discussion about transparency, about equity – what is fair between countries – but also being mindful that when we deal with the viruses it is often in the context of a very real public health urgent situation. This is a good example of that, and that there are also very practical considerations which have to be taken into account. If you put all of those on the table, what is a good solution for balancing practicalities with these large needs for being more equitable, having more open access. This discussion tomorrow over the next days is a continuation of that discussion, in an attempt to get towards a larger framework in which all of this can be accommodated. In tomorrow's IGM we will bring this current experience into it, because this is not a theoretical experience, this is the real world unfolding. I hope that the countries would be mindful of this current experience we are going through, bring it into the discussions that they are having and, hopefully, will help them move towards whatever solution we will have from the discussion.

Deutsche Presse, German News Agency: OXFAM, the British-based charity, has released a statement today saying that the WHO should allow for waiving patents to drugs like Tamiflu® or others. I was just wondering if you might have any comment on this? They were saying that poor countries simply cannot afford to pay for the brand name drug and that the Indian company that has the right to produce its own version cannot sell it outside of India, so other poor countries cannot take advantage of that?

Dr Fukuda: First, WHO's position is that it would really like to have the antiviral drugs as well as the other essential materials like vaccines, to be as widely and broadly accessible as possible. This is part of the reason for the intergovernmental discussion that we are having. This is really the impetus behind many of the actions that we are taking. And this is really driving much our strategic approach for how we deal with this current situation. We are looking very much at the countries we think have the greatest vulnerabilities to this kind of situation, and how do we address that. That is really guiding much of our actions.

In terms of the antiviral drugs, about two years ago, several generic manufacturers were approached and asked about their interest in pre-qualification – meaning that being qualified by WHO to produce these drugs so that they could be made available cheaply. In addition, the current manufacturer of oseltamivir, Roche, approached a number of different companies and provided sub-licenses to those companies so that they could be producing them. However, over the past two years, in essence most of these companies or none of these companies were quite interested in producing the antiviral drugs. There was very little action, but recently again, because of the onset of this A(H1N1) and the spread of it, Cipla as mentioned in India, did begin the manufacturing process. It has been pre-qualified by WHO and so we hope to see the availability of the medications really increase as much as possible.

Question: I just wanted to make sure about the origin of the virus, now that you know that it does not come from a laboratory, is it most of the view of the scientists that it comes from a man in Mexico who was in contact with a swine and he got it from the animal itself?

Dr Fukuda: The virus itself originated from swine, and that is very clear when you analyse the genes and you see what kind of genes are inside this influenza virus. What is not clear is

where did the actual virus originate from. I think that there is almost no evidence right now to be able to say where it originated from. Whether it originated in one country or in another country. Right now, this is probably an interesting question, not the most important question to address right now. I have no doubt that later on a number of scientists will look at it and try to figure out – is there way to figure out where it originated from? This will take looking at a number of viruses from the animal world and so on. But now it is fair to say we simply do not know where it originated from, geographically. Everything is speculation.

Jamil Shade, São Paulo Brazil: About the sharing of viruses and the discussion that will start tomorrow – actually the informal discussions started yesterday already –and it looks like that some countries are willing, or there is an agreement coming into place. The agreement supposedly would be that viruses and products that would be in the lab net, the "réseau" that WHO has, this will not be patented. But of course, the ones that are in the private sector would be still patented. Is this a good solution in your point of view or is there something still to come out of these negotiations?

Dr Fukuda: There are a number of informal meetings that are going on, so the formal meetings themselves will begin tomorrow, but certainly many informal meetings. To put this in perspective: this is very much a discussion among countries. This is not something that WHO will wade [unintelligible] into and say this is what we think you must do. This is really the countries talking about themselves or talking among themselves and saying: this is what we think is a reasonable solution. From WHO's perspective, there really is a balance of things that we hope are taken into account. One of them is simply that we have this urgent situation that has to be dealt with, and there are very practical issues that you can move quickly, that you can deal effectively with. The availability of the gene sequences which we started this discussion off, is a good example of what having information available rapidly means; surveillance depends on having warning as quickly as possible, so this is a critical aspect.

But I think it is also true that there are many countries which do not have access to things that are helpful to their populations, and all governments want to protect their populations. This is the balance to the discussion and that somewhere, the compromise between meeting both of those things, is really important, and it is important because if we get the right balance, it is an agreement which can be acted upon for a long time. If it is not a good agreement then, it is not something which stands the test of time. So the countries will talk it through and we will see where it goes, but I think these are the important aspects to balance.