Special interview

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Japan's preparedness was insufficient, but people on the frontlines did their best

– *How do you evaluate Japan's first-wave response as compared to the response by other countries?*

There are two major elements in infectious disease control. One is to be prepared from normal times. That is called preparedness. The other is response. When an infection breaks out, the initial response is very important – to be able to respond quickly to the outbreak. So any evaluation should be made separately for the two aspects. Japan has not learned sufficiently from the lessons of the 2009 novel influenza pandemic. It was fortunate that Japan was not directly hit by SARS before that and MERS after that, but that proved to be a handicap for Japan in terms of preparedness, unlike Taiwan or South Korea. The issues of risk communication, developing the medical care system and public health centers, and bolstering the National Institute of Infectious Diseases – they were already discussed in 2009. Of course, people cannot be constantly tense. Japan also had its successful experience with the 2009 pandemic – its number of deaths from novel influenza per 100,000 population was far lower than countries in the rest of the world (the number was one digit lower).

On the other hand, the evaluation would be a little different as to how the nation responded to the novel coronavirus under the given conditions. Overall, Japan was no doubt less prepared than Taiwan, which had excellent results in containing the infection. Then how was its response? Japan's response was insufficient in some aspects because of its poor preparedness. Along with the problem of public health centers, the National Institute of Infectious Diseases, PCR tests and the medical care system, hospital beds had not been prepared in sufficient numbers. But under the constraints of those given conditions, people on the frontlines of combating the disease did their best. I think that's the essence of the nation's response to COVID-19.

Among those people were the staff at medical institutions. Well before the state of emergency was declared on April 7, I was concerned that the medical care system could collapse unless hospital beds were secured in sufficient numbers. But in the days leading up to April 7, tension built up significantly among medical professionals. They realized

that this was no ordinary situation and proceeded to build a system of medical service for patients with the novel coronavirus. That was one factor that enabled the nation to barely avert a collapse of the medical system. Public health centers, the citizens at large, the government and prefectural governors all did their best.

- *So if you were to rate Japan, would you give it a score of 50 points out of 100 for preparedness and about 60 points for response?*

No, the score for preparedness would be much lower. There's no doubt that Japan had problems in its preparedness. But it performed relatively well in terms of response. [The gap between the preparedness score and response score] was much wider than 50 to 60. Of course, there were various problems in the response under the given conditions, but they did relatively well in that respect.

The difficulty of risk communication

- *Under the constraints of scarce capacity of PCR tests in the initial phase, a very difficult issue was what criteria would be set for holding the tests. The question was how to align testing capacity and testing criteria. If a loose standard was set for holding the tests, there would emerge large numbers of people who should be tested but couldn't be tested, possibly causing a panic. On the other hand, if the criteria were set too tightly, some people might not be tested even though they were infected with the virus. The expert panel called for boosting the capacity of PCR tests, but the pace of increase was slow. In the face of such a reality, how did you try to match the pace of increase in testing capacity with that of relaxing testing criteria?*

PCR tests were a big problem, but the problem was not that of the PCR tests alone. What was difficult with regard to PCR tests was risk communication. PCR tests are a part of the measures to control an infectious disease, and the response will change according to the situation of the infection. Public health and infectious disease control are a bit different from pure science. That is the characteristic of public health. In short, public health response involves issues of society, people's movement, money, politics and decision-making. In addition to theory, you need to think how the measure will be carried out in practice and what impact it will have on society. The ways of holding the tests will naturally be different according to whether testing capacity is scarce or capacity is gradually increasing. It becomes extremely important to adjust the testing policy each time the infection situation changes. No organization, including the World Health

Organization, is capable of a perfect operation for infectious disease control. Other countries are also confronted with many problems.

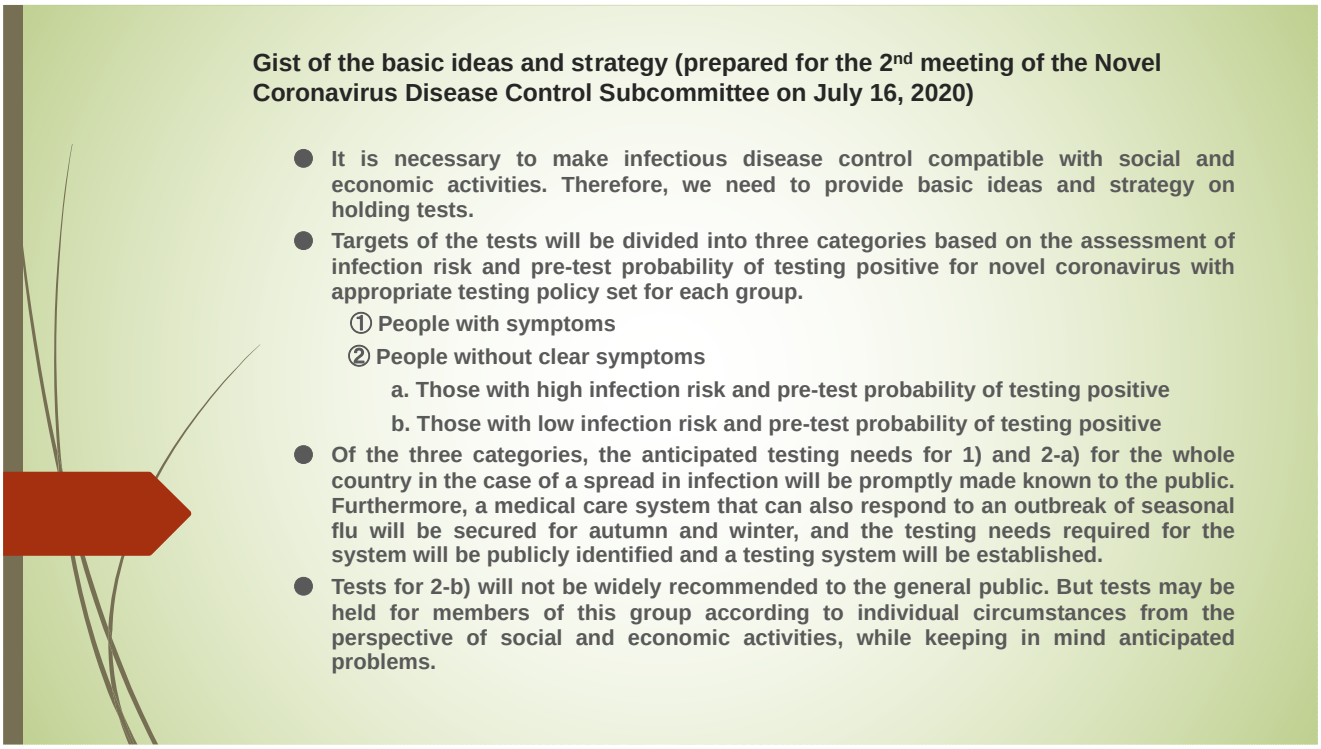
The issue of whether or not to wait for four days [before holding PCR tests on people with fever of 37.5 degrees or higher] came up on the same day, as far as I remember, that the government queried us as to what should be done with the passengers aboard the cruise ship. The government told us that it would like to propose having people wait for four days before they took the PCR tests and asked for our opinion. We knew that PCR testing capacity was limited at the time, and were well aware that the capacity would not easily increase. Under that condition, the government proposed the four-day waiting period. We had information from doctors seeing patients as well as from China that patients' conditions suddenly took a turn for the worse about a week after running the fever. According to a clinical doctor in Japan, patients had relatively mild symptoms for about a week after the onset of the disease following the infection and the incubation period – and many patients were cured after that, but some fell into worse conditions about a week after the onset of the disease. We had that in mind. Then, PCR testing capacity was too short and would be used up quickly. But we would need to quickly test people with pre-existing conditions as an exception. There were those two issues. We needed to make a judgment at some point. The ideal would be testing people on the day they had the fever, but we [couldn't say] such an irresponsible thing when we advised the government.

Ideally, people should be tested on the first day [when they had a fever], irrespective of testing capacity. But you can't possibly do that in practice. Therefore, we had no choice but to prioritize testing people with severe symptoms as a public health policy. That is related more or less to Japan's low rate of COVID-19 deaths. In public health, particularly in infectious disease control, it is important to adapt the theory to the reality. Figuratively speaking, you see with your left eye how to adapt to the given real conditions, while exploring with your right eye how to gradually increase capacity in order to change the conditions. We all talked about having to increase capacity, but the public didn't understand the reason why capacity wouldn't increase. You don't get an answer unless you analyze why that can't be done. An analysis showed various problems with the public health centers, the National Institute of Infectious Diseases, the reagents, and so on, and things wouldn't move forward unless we pointed them out.

International criticism over insufficient PCR tests

- *How conscious were you of the international community's severe assessment of Japan's insufficient PCR test system?*

The subcommittee released its position in a paper titled the "Basic ideas on the testing system and strategy."



One of the purposes of holding tests is infection control, to prevent the infection from spreading. Another is to quickly detect infected patients, isolate them and prevent them from developing serious symptoms. This is different from wanting to feel secure about taking a trip. The former concerns people's lives, while the latter is about wanting to feel safe.

Of the three categories, 1) covers people with symptoms, and 2-a) covers people without symptoms but with a high risk of being infected. For example, if a case of infection takes place in a night entertainment district, there is a high risk of the infection spreading among workers in the district, so tests should be held on as many of them as possible to prevent the infection from spreading. The risk is also high if infection spreads at a hospital, so tests should be held there as a priority. This is indisputably important.

As for category 2-b), or people without symptoms who have a low infection risk and pre-test probability of testing positive, it is understandable that they want to be tested to feel secure and from the viewpoint of social and economic activities. But as for individuals' sense of security, I'm sorry to say that they can't be 100% secure. Even if 100 million people in the country receive the tests once or twice each week, they may become infected the day after they take the tests, and there is a chance of testing false positive or false negative. I would like people to understand that they cannot be 100% secure against this disease. I understand that people would want to receive PCR tests

before they travel, and I think we should explore what can be done. Using testing resources on people with low chances of being infected may help them feel secure at that point, but we know that such measures have little effect in terms of infectious disease control. Testing groups of people with a high prevalence of the disease and isolating infected patients will help prevent infections from spreading, but using lots of resources on people with low chances of infection will hardly lead to infectious disease control. Since the Tokyo Olympic and Paralympic Games are important events, tests should be held at the venues of those events. From public health viewpoints, however, it is useless to do that in communities every day. There is no perfect sense of security. At the same time, the government is not opposed to holding the tests. I think the question is where to increase the tests for what purpose.

Conducting more tests will not necessarily reduce patients

The number of PCR tests held in Japan is no doubt small in absolute terms, but that is not necessarily the case in light of the infection level. Which countries/regions conduct more PCR tests – those where the outbreak has just begun, or those where the infection is expanding? It is natural that their number of PCR tests differ. In Japan, the absolute number of tests is small, but if you divide the number of test samples (as numerator) with the number of casualties (as denominator), Japan's figure is larger than in Western countries. This means that Japan is conducting more tests to find each COVID-19 death. South Korea is probably the only country that conducts more tests per death than Japan.

Conducting more PCR tests does not necessarily reduce the number of patients. There are data that prove that. Conducting PCR tests in order to prevent the infection from spreading is a bit off the mark. You end up talking at cross purposes if you put things together without understanding for what purposes the tests are held.

– *Was it not possible to release the basic ideas on the testing system and strategy much earlier to prevent confusion over PCR tests?*

We might have been able to release it a little bit earlier, but we needed to spend enough time to prepare. We couldn't release inaccurate, half-baked ideas.

Declaration of the state of emergency and travel advisory for SARS

– *For government officials involved in the COVID-19 response, the politically difficult decision was the declaration of the state of emergency. Were there instances when you realized the gravity of the responsibility for recommending issuing the state of emergency in response to the government's request for advice from the viewpoint of infectious disease control?*

I strongly sensed the threat of the virus from the beginning. As of February, I was well aware that it was going to be difficult to deal with. It was troubling that unlike SARS, even asymptomatic carriers and people on whom the virus was still in the incubation period could infect other people. I thought that controlling the virus would be tough.

In terms of the gravity of my responsibility or the impact that my recommendations would have on society, I had a similar experience in dealing with SARS in 2003 as the World Health Organization's regional director for the Western Pacific. SARS is different from the novel coronavirus, but our judgment as public health experts similarly affects society.

In 2003, SARS, which originated in China's Guangdong Province, spread to Hong Kong and infections grew initially among guests at hotels. It was the first public health crisis of the 21st century, in which the epidemic expanded worldwide as foreign businessmen who flew to Hong Kong spread the infection in their home countries upon their return. It was clearly recognized that people coming to Hong Kong became infected and spread the virus back home. The situation would become worse if left unaddressed. I was constantly communicating with WHO Director-General Gro Harlem Brundtland [former prime minister of Norway] over the phone.

The WHO has a tool called the travel advisory. Like the declaration of a state of emergency in Japan, this is a tool to ask for people's cooperation. The trouble I had at that time over whether to issue an advisory asking people throughout the world to avoid nonurgent travel to Hong Kong was very similar to the one I experienced this time. I'm no expert on the economy, but it was clear that Hong Kong's economy would suffer crushing damage if the WHO issued the formal travel advisory. But as I said earlier, public health is founded on pure science but also needs to take into account social and economic factors as well as people's behavior. Moreover, China did not share information on SARS for several months. We needed the information, and were exploring the dispatch of a WHO expert team to Guangdong, but China was reluctant to accept the team, and we had no choice but to play our trump card. Our relations with China would then deteriorate, and Hong Kong's economy would suffer. But from a public health viewpoint, the WHO would not be fulfilling its duty if we didn't take that action. I had that kind of dilemma.

What came to my mind at the time was that I knew as a layman that the economic impact would be huge, but that the infection might spread worldwide and spiral out of control if we failed to take action. I proposed to director-general Brundtland that we issue the travel advisory, and she agreed, saying the infection was spreading mainly in Asia and I was in charge of the Asian region.

As for the declaration of a state of emergency in Japan, as of now (September 17, 2020), Prime Minister Yoshihide Suga, like former Prime Minister Abe, maintains that it's important to make the infection control measures compatible with social and economic activities. The expert panel has been converted into a subcommittee, which is now tasked to put the infection under control while keeping the economy running. Since the end of March, we have known that both infection control and social/economic activities are important, but at that point few people dared to say that out loud. People on the frontlines of combating COVID-19 were warning that further expansion of the infection would no doubt lead to a collapse in the medical care system and cause large numbers of deaths – that it was going to be a nightmare, and that Japan would fall into a situation like Italy or Spain. Watching video footage from Wuhan or Italy, people were concerned that Japan might experience the same conditions. From around the end of March, we were always discussing that while the GDP would fall if economic activities were curbed, we must prevent a collapse of the medical care system – the foundation of Japan's safety and sense of security. Social and economic activities were important, but we had to make a decision. I had no trouble about that.

- *Did you come to a conclusion that the state of emergency must be declared – even setting aside the issues of the economy – before March 23, when Tokyo Governor Yuriko Koike made the "lockdown" remark?*

We had begun discussions [over the state of emergency] before that. We exchanged our opinions because we all realized that we were about to enter an important phase. I remember holding the discussion among ourselves on the Sunday of March 22. Earlier, I was speaking frequently at the meetings of the expert panel about the important roles played by prefectural governors. In infectious disease control, the power of frontline bodies as well as national government policy and support are important. But one of the most important things is the response by each prefecture and local authority. The meaning of declaring a state of emergency is that it gives the governors legal authority. As for the "lockdown" remark, I remember discussing why such a measure needed to be taken if it was going to be taken, or how it was going to be different from what had already been done. I was aware that we needed to tell people that the state of emergency was not going to be a lockdown and urge them to be sufficiently prepared. Reducing people's contacts with others by 80% is not a lockdown. We were going to do it in the Japanese way, and people were not going to disappear from the streets like in Western countries or Wuhan.

So I was thinking that the government should make it clear what it was going to do and what it was not going to do.

The message calling for reducing people's contacts with others by "at least 70% and as close as possible to 80%"

- *We have heard that you negotiated with Prime Minister Abe about the message urging people to reduce contacts with others by "at least 70% and as close as possible to 80%."*

Yes. The government was well aware of the call by Dr. (Hiroshi) Nishiura for an 80% reduction. Nobody knew what was going to happen if people-to-people contacts were indeed cut by 80%, but such a message by the government would mean asking people to refrain from most activities and contacts with other people. But what was important was that it was not a lockdown, not a 100% reduction. We presented to the government our forecasts derived from calculations based on mathematical grounds, and [the prime minister] told us very clearly that he understood our explanations but could not adopt the 80% target alone. I think he understood that it was not a 100% reduction but made clear his opinion that the target was too stringent. We had the second meeting of the advisory council [on the government's basic response policy] scheduled the following day [April 7], so we had to wrap up the discussion. We explained the difference between an 80% reduction and a 70% reduction, and built a consensus among the experts.

Since it was the judgment of the top leader, we knew that the government would not adopt the 80% target alone. It was good that he made that clear. The "70%" idea came from the [government's] side. We all weighed phrases like "as close as possible," "at least" and so on, and I spoke as chair [of the advisory committee]. Such developments may not have been reported by the media, but the government's message was clear.

About the government's request for nationwide closure of schools, we might have had different opinions if we had been consulted.

The experts were not consulted about the Go To campaign

- *The expert panel was not consulted about the government's decision to request a nationwide closure of schools. Were there other examples of government decisions made without seeking the experts' advice that you think the experts should have been consulted about?*

I guess you're referring to the "Go To" campaign. I understand what the government feels about the economy, but if the government is to consult the experts, I would like it to consult us properly. If we were consulted, we could have said that the government should pay attention to so and so issues in launching the campaign, but the decision to exclude Tokyo from the campaign had already been made before the July 16 meeting of the subcommittee. Since the experts have worked together with the government all through [the COVID-19 crisis], we were unhappy that we were being relegated to a rubber-stamp role. I've often asked government officials – and I think things are gradually improving – that we would like them to consult us properly if they're going to ask our advice. I don't like them to half-heartedly consult us on some occasions but not on others. It's all right if the government isn't going to seek the experts' advice at all. It would be easier for people to understand if that's been made clearer. Bit by bit, things are going in the right direction. We held extensive discussions on the Go To campaign in recent sessions of the subcommittee, and we compiled our views on the campaign. Whether or not to adopt our recommendations is up to the government. I thing it's getting gradually better.

– *There were differences between the experts and the government over the criteria for lifting the state of emergency. Did that experience make you more resolved than before that your role as an advisory organ should be clarified?*

I don't think the condition for lifting [the state of emergency] was a big problem. As for the reason behind the criterion of [the cumulative number of new infections over the latest week] falling below 0.5 per 100,000 population, there were two objectives in declaring the state of emergency in the first place. One was to prevent a collapse of the medical care system by reducing the number of infection cases, and the other was to bring the infection level back to the stage where we could take countermeasures on infection clusters. And the figure of 0.5 is the level where we could take the cluster countermeasures. The outbreak of large-scale hospital-acquired infections was one example that pointed to the limitations of cluster countermeasures. However, that number was only a guide. Our opinion was that the criterion should be 0.5. But if the government wanted to set it at a range – between 0.5 and 1 – and if the government was taking the final responsibility – we did not necessarily want the government to follow everything we said. At that time, the opinions of both parties were clear – we called for 0.5, and the government wanted to set the criteria at a certain range. Since the government makes the final decision, the difference of opinion was not a problem. It would be a larger problem if the division of our roles were mixed up and blurred. Our opinion differed from the government's on a number of occasions. What's important is to clearly explain who made the final decision. People may not necessarily understand it all, but I believe that's how things should be.

The message in the word "forward-leading"

– *In the June 24 news conference by the Expert Meeting on the Novel Coronavirus Disease Control, members of the panel said that the panel had become "forward-leading" in its posture and may have given the wrong impression that the panel made the decisions on government policy. What message did you want to send to the government by using that word?*

We could have used a different word, but it would look like we're praising ourselves if we said that we did what we needed to do to fulfill our duties. We noticed at some point that we needed to reflect on what we did, so instead of saying that we did our job proactively, we liked to make some adjustment, since nobody in the world is perfect. What's important is not the word "forward-leaning" itself, but why we became "forward-leaning" in our stance. That's because we had no choice but to be "forward-leaning."

At that point, the government was doing all it could, including the response to the outbreak aboard the cruise ship. An important job of the government is to respond to each of the individual problems that emerge on a daily basis. Setting medium- to long-term policy and risk communication are also important, but the government is responsible for putting out the fire when it breaks out. That's where we're different. In that sense, the government was doing all it could. I think a fair evaluation should be given about this point. I watched the government officials doing all they could from morning to night every day.

I perfectly understand that people feel uneasy. Society at large would feel insecure unless somebody includes the whole big picture – what is the essential nature of this new disease, how much is known, how much is not known, and what must be done – in the strategy to combat the infectious disease. It seemed like the government had too much on its hands. At the meeting of the [health ministry] advisory board [in February], we were given specific questions on what should be done about concrete issues. From our viewpoints, that was of course important, but what was more important was to present the entire picture. We kept saying that from the beginning of February, but everybody was too busy to do it.

Normally, experts would not take a "forward-leaning" stance. When you go to the meetings of many government advisory councils, you are given draft documents already prepared, and the chair of the meeting and the secretariat staff wrap up the discussion. However, this was no ordinary disease. I still recall feeling that it had finally happened when cases of infection were reported simultaneously in multiple prefectures on February 13 [one each in Kanagawa, Tokyo, Wakayama and Chiba]. We were asked

to answer questions from the government at the meeting. But we thought we should do more, even though the government might not like it. Initially, we didn't intend to hold a news conference but just release the paper. But members of the media asked us to hold a news conference, and as we started doing that, we began to issue recommendations about what we wanted people to do. Normally, it was something that we should have asked the government to do, but we could not afford to go through that process at the time. I regret that. And then after a while, people started asking why those experts are making decisions, saying that economic experts should be included in the discussion because the disease was having a big impact on the economy, and even blaming us for the slow progress in the efforts to increase PCR test capacity. In afterthought, what we did initially was inevitable. We had to act aggressively. But as the situation began to calm down, I started to think that it was irrational to keep up that position. We thought of the economy as well, but public perception was that we cared only about the infectious disease. So we proposed that the government should build a new framework for discussion.

- *Did you think that the government could have said it made decisions based on the opinions of the expert panel, or that the government failed to protect the experts [from public criticism]?*

We were ready to take the blame, because we thought that we had crossed the Rubicon. We did not feel that the government failed to protect us or have any such emotional sentiment. But we had an idea about what should be the ideal relationship with the government. I believe the government should seek expert opinions on technical issues and then make a judgment from its broader viewpoint, but there was no such relationship. I don't think it's a problem if the experts and the government differ in their opinions. The government either adopts the experts' recommendation or rejects it and explains why. I thought that would be the ideal relationship.

- *What did you think of the remark by former Prime Minister Abe's in his May 25 news conference about the "power of the Japan model"?*

That depends on with what country/region or on what aspects you make the comparison. So we need to put the question in broader context. For example, Taiwan had a low rate of deaths from COVID-19 in proportion to its population, but there were various factors involved, including its population and its distance from China. It is undeniable that Japan's mortality rate was lower than in Western countries. No doubt Japan, in its own approach to combating the pandemic, achieved a certain result under given conditions, and I think the Japanese style of cluster countermeasures contributed to that. It was good that Dr. (Hitoshi) Oshitani and Dr. Nishiura found the mechanism for

the spread of this disease by way of infection clusters, and established the concept of the "Three Cs" as the standard for countermeasures in the early phase. And as I said earlier, the medical institutions and their staff, public health centers and the public cooperated with the fight under the given conditions. There were various problems, but it was good that the nation was somehow able to adjust the Japanese-style model, despite its relatively weak preparedness. A lot remains unknown, however, about such matters as the impact of BCG vaccination and genetic factors.

- *It appears that the WHO has not yet made a positive evaluation of Japan's infection cluster countermeasures, but are there moves to consider the Japan model as a universal approach?*

The WHO has said that Japan's approach to COVID-19 was a success. Renowned German virologist Christian Drosten also said that lessons should be learned from Japan's response to the novel coronavirus. [Note: Drosten said Japan's response should be a model for future actions against COVID-19 and that its cluster countermeasures can be the key to preventing a second wave of the pandemic, according to Nikkei, May 30.]

(This interview was held on September 17, 2020 at the Japan Community Health Care Organization, by Akihisa Shiozaki, chief investigator of the working group, and Yoshiko Hashimoto, deputy chief investigator.)