

FORUM REPORT 021

Global Pandemic Response

Reexamining Japan in Global Context Forum, Tokyo, Japan, April 25, 2023

Thirteen Lessons from COVID

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On April 25, 2023, the Reexamining Japan in Global Context forum met in Tokyo to discuss lessons from the past three years of the COVID-19 pandemic. Dr. Ezekiel Emanuel gave the first presentation. Dr. Emanuel is the Vice Provost for Global Initiatives at the University of Pennsylvania, a former advisor to the Biden-Harris Transition COVID Advisory Board, and a Special Advisor to the Director General of the World Health Organization (WHO). He presented 13 lessons from the United States' response to the pandemic.

Between U.S. President Joe Biden's election in late 2020 and his inauguration in early 2021, the new White House team developed a plan to deal with the COVID-19 pandemic. That plan included a successful vaccination campaign. However, by the end of 2021, very little vaccination was happening and there was virtually no strategy to manage the ongoing health crisis.

In 2022, Dr. Emanuel and two dozen other experts released a roadmap to help the United States "sustainably live with COVID" and get to the "next normal." They focused on improving overall population health and helped shift the discussion to include all major respiratory diseases.

Today, it seems that many leaders, including those in the Biden administration, would prefer not to talk about COVID at all. Policymaking reflects this "see no evil, speak no evil" approach. For example, the United States terminated its Public Health Emergency on May 11, 2023, despite the fact that programs introduced during that emergency and dependent upon its ongoing status had dramatically reduced child

poverty and led to other social benefits. The White House COVID-19 Response Team was also disbanded.

While many policymakers evinced haste to move on from COVID, however, the virus that causes it continues to circulate, affecting both the U.S. population and the U.S. economy, leaving unresolved problems for future leaders to confront. A major example is the Long-COVID crisis. Long COVID has disabled millions of people in the United States alone, with enormous implications for economic and population health. Unfortunately, Long COVID is not being treated as a policy priority. Very little has been done to help understand, diagnose, prevent, or treat the damage that even mild COVID infections can cause. There is virtually nothing to show for the US\$1 billion that the United States has spent on research thus far.

Some countries, such as Singapore, have been evaluating their pandemic response performance so that they can improve it in the future. In the United States, the book *Lessons from the COVID War* is probably the best account of what happened. A government commission on lessons would be in order, but political leaders have no appetite for it. Nevertheless, it is possible to draw some clear lessons from the U.S. experience.

Lesson 1: People have limited tolerance for major change.

Humans can voluntarily endure major restrictions in daily life and social interactions only for a limited period of time. Within about 24-30 months—and often sooner—leaders



and laypeople alike face enormous psychological pressure to revert to routine behaviour. Ironically, in yielding to these pressures, we have tolerated massive changes to the risks we are now willing to accept, as described in Lesson 12. As we plan for the next pandemic, policies should account for these pressures and the limitations of human perseverance.

Lesson 2: Social norms and environmental design are very important.

Information alone is rarely sufficient to change behaviour. This is especially true when the situation changes daily, different leaders give different messages, and misinformation and disinformation are everywhere. In contrast, social norms can change behaviour dramatically. To decide whether our own behaviour is appropriate, we look at what other people are doing, especially social leaders. For example, it is easier to keep wearing a mask over an extended period of time in Tokyo than in Washington D.C., precisely because it is normal for people in Japan—but not people in the United States—to do so.

Social norms can also work against us. When the wrong thing becomes normal, it is very hard to change that behaviour. Unfortunately, in the United States and other countries, widespread transmission, illness, disability, and death have now been normalized.

The physical environment is at least as important as the social environment. It is often much easier to change the physical environment than to change human behaviour. Some of our most powerful tools involve indoor air quality design, infrastructure, and regulation. These tools could give us clean air to breathe in shared spaces. Unfortunately,

these tools have barely been used. A clean air strategy includes tactics such as opening windows, installing HEPA and MERV-13 air filters, deploying CO₂ monitors, upgrading heating, cooling, and air conditioning (HVAC) systems, and installing ultraviolet germicidal irradiation (UVGI) and Far-UVC lights. We should also update building codes and develop strong indoor air quality regulations for businesses and public spaces.

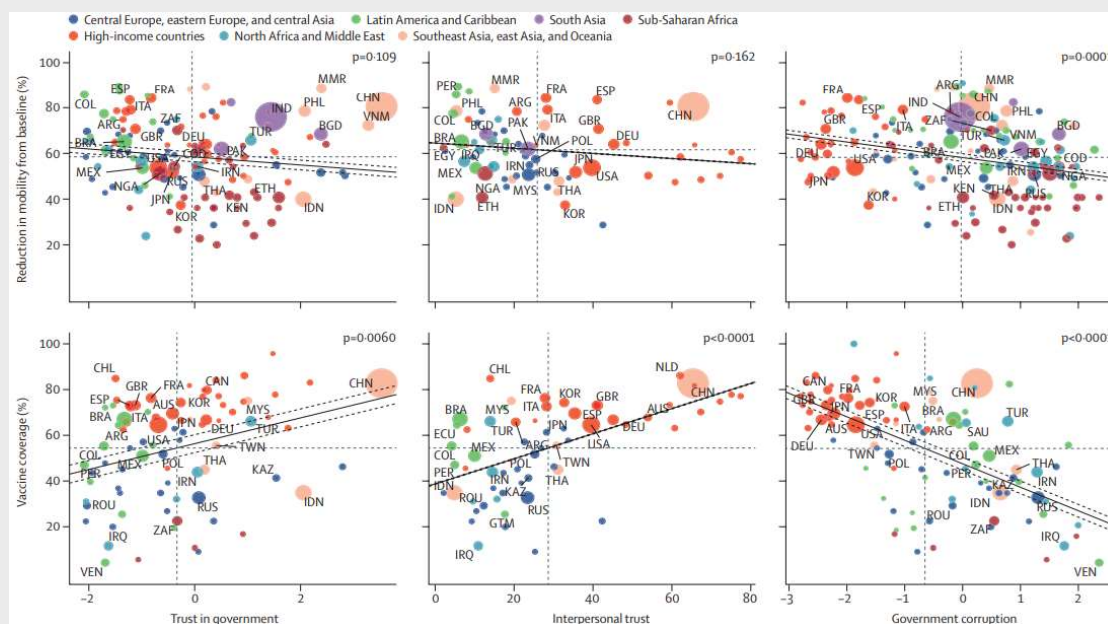
Changing our physical environment would offer benefits far beyond the current pandemic. Clean indoor air will boost productivity, prevent respiratory diseases, and improve public health generally. If we learn from this pandemic, we will start making large investments in clean indoor air.

Lesson 3: Public trust saves lives during emergencies.

Emergency responses tend to be more successful when there is more public trust. Citizens' trust in government, in the press, and in each other is critical to fighting a global pandemic. But trust is very difficult to earn and very easy to lose. Unfortunately, leaders have damaged public trust throughout the pandemic, as discussed in Lesson 7. We should evaluate future policies, and our preparedness for the next pandemic, based on how they affect and rely on public trust.

Lesson 4: Preparation is key.

Preparation saves lives during a public health emergency. It can even prevent emergencies from happening. Unfortunately, many countries were not as prepared as they could have been, despite years of warnings. Some governments had pandemic plans, but did not follow them.



The size of each circle represents total population. The solid line represents the fit of the linear regression for the two variables, and dotted lines represent the 95% CI.

Preparing for disease outbreaks requires multiple capacities. One example is disease surveillance. Widespread wastewater surveillance should be the norm in 2023. Relatedly, as discussed in Lesson 5, frequent and transparent data reporting is essential. For example, researchers should know in real time how many people are visiting hospitals with respiratory symptoms.

Good stockpiles of antibiotics, antivirals, and personal protective equipment (PPE) are also critical. Some countries had stockpiles of PPE that were not maintained. Relatedly, diversified, resilient supply chains and domestic production capacity are essential. It can be disastrous to rely on a single country like China for critical supplies such as masks or pharmaceuticals.

None of these capacities can be built overnight. They take years of planning, simulation exercises, and ongoing investment from different levels of government. The price premium is a small insurance cost to pay to avoid a much larger cost during a pandemic for which society is unready.

We must convince policymakers to prepare better. We are overdue for an influenza pandemic. Pandemic risks have also been increasing generally because of global heating, biodiversity destruction, factory farms, and the overuse of antibiotics. Many experts believe that the risk of another COVID-like event could be as high as 50 percent in the next 20 years. Unfortunately, with eroded public trust, burnt-out health-care systems, and policymakers who want to move on, we are arguably more vulnerable to a new pandemic today than we were before the COVID-19 pandemic began.

Japan was better prepared than many countries in 2019. Taiwan offers another helpful case study. In January 2020, some experts thought that Taiwan would suffer badly because of travel ties with China. However, after the 2003 SARS¹ outbreak, Taiwan strengthened its disease surveillance capacities, improved its health information systems, and established a strategy to prevent travelers from spreading disease. These capacities helped protect Taiwan during COVID. By May 2020, while places like New York and Italy had been experiencing the trauma of overflowing hospitals and morgues, Taiwan had identified only 440 cases and had only six deaths.

To learn from this pandemic, leaders should remember that by the time a crisis starts, it is too late to prepare.

Lesson 5: Data coordination is critical.

Reliable, real-time data save lives in an emergency. Effective public health decision-making depends on them. The U.S. approach to data collection and management is disastrous. The federal government does not have control over health data collected at the state level. As a result, the United States tried to rely on other countries' data about variants, vaccine effectiveness, and hospitalizations. This bad informa-

tion system led to bad communication, bad policymaking, and damaged public trust.

To learn from these failures, the United States should create strong incentives for health organizations to report data to a central, transparent data repository.

Lesson 6: Invest in aerosol-based prevention strategies.

It is now clear that respiratory viruses are airborne, spread primarily by aerosols, and travel far beyond “six feet [or two metres] apart.” Evidence for aerosol transmission began appearing early in 2020. However, the WHO, the U.S. Centres for Disease Control, and other public health authorities around the world clung to a “droplet transmission” dogma for far too long. Relatedly, many public health leaders took too long to acknowledge that masks work, and to communicate clearly that N95 masks are superior to surgical masks for limiting aerosol transmission.

We can reduce the spread of respiratory viruses by investing in clean indoor air and making high-quality N95 and KN95 masks readily available. Engineering solutions such as indoor air ventilation, filtration, and sanitation (as described in Lesson 2) have enormous untapped potential but require leadership. Only the government can update building codes and indoor air quality regulations. If we learn from this pandemic, we will invest in aerosol-based prevention to ensure we have clean air to share indoors.

Lesson 7: Vaccines alone probably won't prevent transmission.

Vaccines help enormously to reduce hospitalizations and deaths. However, in the United States and other countries, health leaders led people to believe that vaccination would prevent COVID infections. Instead of investing in a variety of tools to reduce transmission and treat infection, many policymakers treated vaccines as a silver bullet to end the pandemic and get “back to normal.” This was a big mistake, and it seriously damaged public trust. COVID's incubation time is too short to rely on vaccines alone. The problem worsened as COVID spread and mutated in hundreds of millions of hosts around the world, reducing vaccine effectiveness over time.

In future, public health policies and messages should emphasize that vaccines prevent serious illness and death, rather than treating them as a silver bullet. As Lessons 2 and 6 have emphasized, we need a variety of tools to prepare for and respond to pandemic threats. As discussed in Lesson 3, these tools are less likely to succeed where poor public health communication and wishful thinking have eroded public trust.

Lesson 8: Tailor policies to local context.

Policy responses should be customized based on local circumstances. The local policy context includes differences in viral prevalence and vaccination rates. In the United States, for example, we saw larger viral surges in some regions than in others. An optimal policy approach would involve more

¹ Sudden Acute Respiratory Syndrome.

context-specific responses and fewer one-size-fits-all policies. A localized approach also requires good data coordination, as outlined in Lesson 5.

Lesson 9: Minimize education interruptions.

School safety is primarily an engineering and design problem. There are school safety solutions available that we have barely used. Taken together, these tools will also limit the spread of respiratory diseases into the broader community.

As discussed in Lessons 2 and 6, school safety can be improved by investing in indoor air quality. Clean, fresh indoor air also improves students' cognition, energy, and learning. Available tools include air quality standards, open windows, classroom air filters, UV lights, and upgraded HVAC systems. Schools can also be made safer by changing lunch, gym, and choir practices to reduce aerosols, increasing outdoor activities, and making high-quality tests and N95 masks available, especially during surges.

Schools should only be interrupted during severe surges. Unfortunately, many countries simply closed schools, choosing a "pound of cure" over an "ounce of prevention."

Lesson 10: Minimize social isolation.

Social isolation is harmful and can even be lethal. It can result in depression, and infection can make it worse. Social isolation can also cause people to lose social skills. Fortunately, social isolation is also unnecessary. During a pandemic, outdoor public spaces such as parks, playgrounds, beaches, and pedestrian areas should stay open. We can reduce social isolation with physical distancing, making N95 masks widely available, and deploying clean air strategies to make it safer to share the air, as described in Lessons 2, 6, and 9.

Lesson 11: Take four steps to minimize deaths.

Deaths can be minimized through four proven, simple steps. First, vaccination is important, especially for vulnerable populations such as nursing home residents and front-line workers. However, as described in Lesson 7, a vaccine-only strategy will likely fail. Second, it is hard to overstate how important indoor air quality is for preventing deadly infections. The tools available have already been discussed in Lessons 2, 6, and 9. Third, high-quality N95 and KN95 masks should be made widely available for people to wear. Finally, people will not stay home with an illness if they do not have paid time off because they will feel that they cannot afford to do so. Policymakers should make sure that all workers have paid sick leave.

Taken together, these four simple steps will drastically reduce deadly infections.

Lesson 12: Risk tolerance is malleable.

Many policymakers and members of the public have dramatically increased their risk tolerance since 2020. A virus that no one had heard of three and a half years ago is now

one of the top five causes of death in the United States, where it directly killed 250,000 people in 2022—over five times the number of people killed by breast cancer. Many of the 1.1 million Americans killed since 2020 have been minorities, people with obesity, diabetics, and people over the age of 60. As a vascular disease, COVID also increases the risks of heart disease, strokes, and other long-term harms.

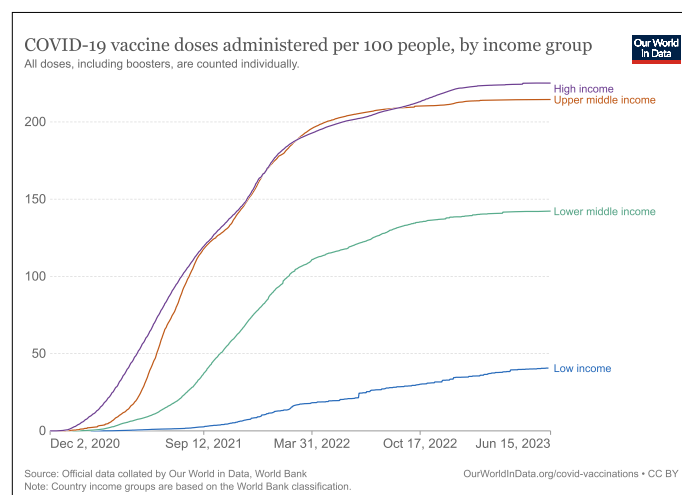
It can be hard to notice our desensitization. However, the pressure to get back to normal described in Lesson 1, combined with a failure to clean the air as described in Lessons 2 and 6, have imposed higher risks on everyone who is vulnerable to disease. Future pandemic planning needs to account for these shifts in risk tolerance.

Lesson 13: Use a "health burden" standard to define equitable global vaccine distribution.

Before COVID vaccines were available, many world leaders, non-governmental organizations, and academics called for global vaccine distribution to be "fair and equitable." They were legitimately concerned that high-income countries would buy so many vaccines that low- and middle-income countries would not have enough. Canada, for example, had contracts to provide nine vaccines for every Canadian, since it was not yet clear which vaccines would be effective. This raises an important question: How should we assess whether global COVID vaccine distribution was fair and equitable?

Dr. Emanuel assembled a group of global health leaders to help answer this question. They took a three-step approach. First, they asked, "What is the right ethical standard for fair and equitable allocation of scarce medical resources?" Second, they asked, "What is the right quantitative equity metric to measure whether the standard has been met?" Finally, they asked, "Does empirical evaluation of the equity metric show equitable distribution?"

Regarding ethical standards, there were two approaches to consider. First, the WHO and COVID-19 Vaccines Global Access (COVAX) promoted a population-based standard. Under that approach, all countries should receive the same number of vaccines per person. In contrast, Dr. Emanuel's



Select Countries — Excess Deaths from March–December 2020, Vaccines from June 2021

Countries (Listed by Cumulative Excess Deaths) (Higher is worse)	Excess Deaths	Vaccines Per Excess Deaths	Ranking	Excess Deaths Per 100,000 Population	Vaccines per Excess Deaths per 100,000 Population	Ranking
United States of America	465,706	820.2	84	141.8	269,3581.3	41
Indonesia	357,988	274.3	123	132.8	739,539.2	51
Mexico	314,540	173.6	136	251.5	217,160.8	69
Peru	133,816	68.5	154	407.7	22,488.9	124
Italy	100,431	522.5	102	168.1	312,145.4	63
Egypt	90,949	76.3	151	86.1	80,617.9	89
The United Kingdom	85,504	884.6	80	127.9	591,343.3	53
South Africa	54,402	138.5	141	93.7	804,24.1	90
Colombia	54,060	545.9	100	107.7	274,032.3	65
Somalia	12,918	38.7	167	80.8	6,188.1	151
Mali	12,468	23.7	175	60.6	4,884.5	155
Lithuania	6,651	688.6	88	238	19,243.1	126
Ghana	6,461	212.4	129	20.5	66,928.7	97
Mozambique	5,717	130.1	142	18.9	39,365.1	103
Zambia	5,294	43.1	162	28.8	7,916.7	142
Rwanda	-370	-2003.4	10	-2.9	-255,600	9

High

Upper Middle

Lower Middle

Low



Select Countries — March 2020–December 2021

Countries (Listed by Cumulative Excess Deaths) (Higher is worse)	Excess Deaths	Vaccines Per Excess Deaths	Ranking	Excess Deaths Per 100,000 Population	Vaccines per Excess Deaths per 100,000 Population	Ranking
Indonesia	1,028,565	299.9	136	381.5	808,637.4	38
United States of America	932,458	665.4	102	284	2,184,719.6	29
Mexico	626,217	311.6	135	500.6	389,798.7	53
Peru	289,668	201.2	156	882.5	66,051.4	97
Egypt	251,102	272.2	140	237.7	287,587.8	59
South Africa	238,671	124.4	170	410.9	72,265.0	94
Colombia	164,744	608.2	104	328.3	305,201.6	58
Italy	160,801	723	98	269.2	431,870.2	52
The United Kingdom	148,897	912.5	82	222.8	609,849.5	42
Mozambique	42,731	582.9	106	141.1	176,540.9	71
Somalia	35,461	163.5	163	221.9	261,23.9	121
Mali	27,311	89.9	175	132.8	18,488.0	136
Zambia	23,553	205	155	128.1	37,683.2	113
Ghana	20,907	1177.8	69	66.3	371,412.1	55
Lithuania	17,255	482.4	119	617.5	13,478.6	144
Rwanda	5,401	3,553.4	39	42.1	455,861.0	49

High

Upper Middle

Lower Middle

Low



group developed a health-needs-based ethical standard under which vaccines should be allocated based on where they would relieve the greatest health burden. The COVID health burden includes quantitative equity metrics such as excess deaths from COVID and medical delays.

Empirically testing the needs-based standard requires a nuanced analysis. Excess deaths vary from country to country in complex ways, based on factors that include viral surges,

age distribution, population health, government effectiveness, and trust.

Key vaccine allocation decisions were made in December 2020. At that point, the ten countries with the most excess deaths included two high-income countries, four upper-middle income countries, and four lower-middle income countries. The United States was number one; no sub-Saharan African country made the top ten. Interestingly, some

countries had experienced negative excess deaths at that time, including Japan (−30,139) and Rwanda (−370). Six months later, the situation was similar: there was still no low-income country in the top ten.

The first reliable data we have on global vaccine distribution came from UNICEF in June 2021. Then, countries with the worst excess deaths did not necessarily receive the most vaccines. For example, many upper-middle and lower-middle income countries did not receive vaccines commensurate with the high levels of excess death they had experienced. One example is Peru: despite 407.7 excess deaths per 100,000 people, that country received only 68.5 vaccines per excess death.

Looking at the data from 2020–2021, we can draw four conclusions according to the health burden approach:

1. Some middle-income countries—such as Egypt, Peru, and South Africa—experienced high excess deaths, but did not receive enough vaccines. This was inequitable.
2. Countries with low or negative excess deaths received too many vaccines, especially when vaccines were in short supply. This was also inequitable.
3. Despite being vaccine-producing countries, the United States and the United Kingdom experienced so many excess deaths that the high number of vaccines that they received nevertheless did not qualify as too many.
4. Other than South Africa, low-income and sub-Saharan countries generally experienced low excess deaths. Their low vaccine allocation was therefore not inequitable.

More recently, the WHO seems to be implicitly adopting the health burden approach. The WHO's new Zero Draft of its Pandemic Treaty recognizes that vaccines should be allocated “based on public health risks and needs.” This approach seeks to minimize harms, optimize benefits, mitigate disparities, and offer equal moral concern.



A lively discussion followed Dr. Emanuel's presentation.

The first question was about testing. A participant observed that Japan initially tried to test as many people as possible, but, owing to resource restrictions, shifted focus to testing the elderly. Was this wise? Dr. Emanuel pointed out that testing is a means, not an end. The purpose of testing is to generate information that stops people from infecting others. To be useful, testing must produce action—such as sending workers home with paid sick leave. Testing can be particularly helpful in crowded environments, such as nursing

homes, prisons, and schools, so, given resource constraints, the shift of focus to testing the elderly was reasonable.

Another participant asked whether there were any general lessons to learn with respect to viral evolution that would help us with pandemic planning. Dr. Emanuel replied that it is very difficult to anticipate how a virus will evolve during a pandemic, but that public health officials should be aware that a viral pathogen is typically a moving target.

The next question was about vaccine distribution. Instead of allocating vaccines to countries, would a regional or local approach be better? Dr. Emanuel responded that there is no practical alternative to distributing vaccines to countries and that national governments must choose how to allocate them. Nevertheless, they can cooperate on a regional basis if they wish. However vaccines are distributed, though, countries should strive to employ a defensible principle of equity of the kind prescribed by the health burden approach. At this point, another participant observed that the best implementation of the health burden approach to distribution would allocate vaccines on the basis of greatest marginal (rather than total) contribution to avoiding excess deaths, and that this would require taking into account such things as vaccine hesitancy. Dr. Emanuel agreed, but noted that a marginal contribution approach would be very difficult to operationalize, and hence to implement.

Next, a participant pointed out that vaccines were used not merely to boost immunity, but also to promote hope. Does the need for hope affect where and how vaccines should be allocated? Dr. Emanuel replied that hope is very important, but preventing deaths is the most important goal and should be the guiding objective.

The next question was about vaccine production. Was Dr. Emanuel surprised by the speed of development and production? Is it dangerous to expect that vaccines can be developed at the same speed in the future? Dr. Emanuel said that the speed of development and production of COVID vaccines was unprecedented. New vaccines normally take more than a decade to develop. mRNA² technology had been around since 2005, but the COVID vaccines were the first mRNA products. Sometimes, an emergency can generate a breakthrough. In this case, that breakthrough took billions of dollars of prior investment in an unproven technology. So, in that sense, we were lucky. But that investment may pay off in the future in the form of more rapid vaccine development for other pathogens.

Next, a participant asked whom Dr. Emanuel hoped to reach with his advocacy. Dr. Emanuel replied that he primarily hoped to influence governments. They are the ones who can take meaningful action, and they must do so. However, because of pandemic fatigue, neither Republicans nor Democrats in the United States want to do anything at the moment. But they should, and there are many regulatory steps

¹ Messenger ribonucleic acid.

that they could take that would not be politically controversial even under current circumstances. Improving indoor air quality is a case in point: this would reduce many illnesses, including asthma, hospital-acquired infections, and possibly Alzheimer's and other forms of dementia, not to mention improve quality of life in general. It would also reduce the burden on a strained health care system. Clean indoor air should be an uncontroversial priority for everyone.

Next, Dr. Emanuel was asked about disinformation. Japan has strong social norms, but has still suffered from misinformation and disinformation, particularly among some right-wing political groups. What can we do to combat pandemic-related conspiracy theories? Dr. Emanuel pointed out that COVID-related conspiracy theories are part of a larger sociopolitical ecosystem that includes health, climate, and partisan misinformation and disinformation. This ecosystem thrives on social media and in information bubbles. What is required is a systematic approach to combating a permissive ecosystem for inaccurate information, especially on social media, so that people are not living in information bubbles.

Finally, a participant asked about Long COVID. We have known since 2020 that COVID is a vascular disease, and that even mild infections can affect the brain, heart, liver, and other organs. The WHO has estimated that one-in-ten COVID infections cause long-term illness, suggesting that hundreds of millions of people worldwide will need long-

term healthcare. In countries such as Canada, leaders have given up on prevention, and people have been re-infected multiple times. Some banks and insurers have also warned that post-acute COVID damage may have profound impacts on the labour force and healthcare system. If COVID infections are making the population sicker over time, can our current approach to “living with” these infections be sustained, or will something have to change? Dr. Emanuel replied that millions of people need help. We need leadership and empirical trials. We need to clarify the mechanisms that cause post-acute illness. Research suggests that multiple mechanisms are likely causing long-term harms. These include immune system dysregulation, organ damage, vascular damage, tiny blood clots, and viral persistence. We also need empirical trials for treatments. There is a long list of things to try. The research agenda was clear more than a year ago, but the U.S. National Institutes of Health has not done nearly enough. If we get serious about preventing, diagnosing, and treating Long COVID, we can apply what we learn to other post-acute illnesses, such as Lyme disease and myalgic encephalomyelitis/chronic fatigue syndrome (ME/CFS). Tens of millions of people have experienced Long COVID in the United States alone. All of them want help. There is no shortage of people willing to join clinical trials—only a shortage of leadership to treat Long COVID like a priority that it should be.

Japan's Response to COVID-19

Yoshiyuki Sagara

Asia Pacific Initiative, Tokyo, Japan

Mr. Yoshiyuki Sagara gave the second presentation. Mr. Sagara is a Senior Research Fellow at the Asia Pacific Initiative, with wide-ranging expertise in economic and health security, international conflicts, and Japanese foreign policy. He analyzed the most recent three Japanese leaders' responses to COVID in terms of a shifting “center of gravity” among life, prosperity, and freedom.

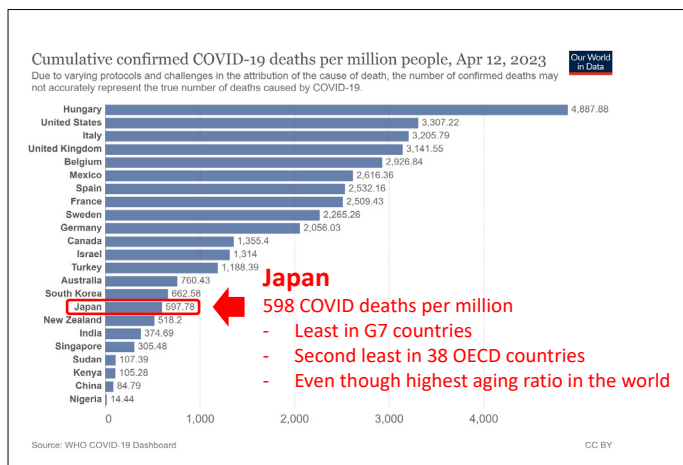
The 2011 Tohoku earthquake and tsunami was a historic and devastating tragedy for Japan, causing 19,689 direct and indirect deaths. COVID-19 has killed at least 74,000 people in Japan so far—nearly four times as many people—and many millions more around the world. The SARS-CoV-2 virus that causes COVID-19 is extremely contagious and can spread even without symptoms. COVID-19 quickly became Japan's biggest crisis of the postwar era. Given the virus's deadliness and contagiousness, how should we analyze Japan's COVID-19 policy responses? What do those responses tell us about Japan's priorities?

To begin with, it is important to note that, in essence, COVID-19 is a “national health security” issue. Following a series of anthrax attacks in 2001, the United States launched the Global Health Security Initiative. The WHO later launched a Global Health Security Agenda. These developments helped policymakers treat diseases such as SARS, MERS,¹ H1N1 influenza, and Ebola as security risks. However, the idea of “global health security” has often assumed that outbreaks mostly happen in low-income countries, with little direct impact for high-income nationals. COVID showed that health threats are truly global, and our health security truly is interdependent. The COVID pandemic has had catastrophic consequences for people and economies around the world.

Japan suffered 598 COVID deaths per million people. This was the second-lowest death rate among 38 OECD²

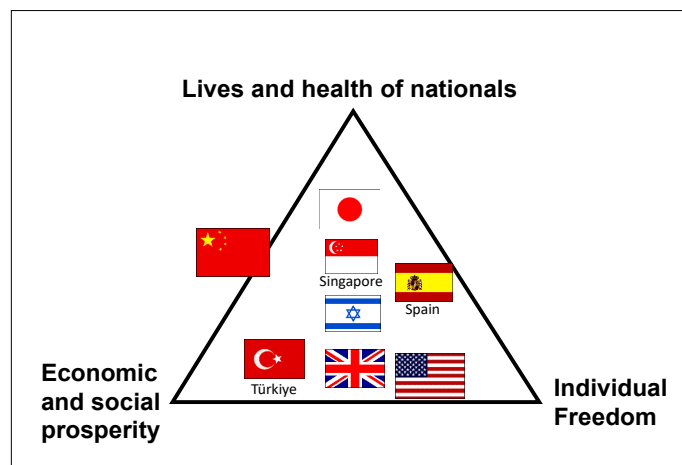
¹ Middle East Respiratory Syndrome.

² Organization for Economic Cooperation and Development.



Japan
598 COVID deaths per million

- Least in G7 countries
- Second least in 38 OECD countries
- Even though highest aging ratio in the world



countries, even though Japan has a famously aging population. However, Japan's COVID response was not just about saving lives. Leaders also prioritized prosperity and freedom. To analyze pandemic policymaking, it is helpful to imagine a shifting "centre of gravity" among these three priorities. The policy balance between life, prosperity, and freedom shifted over the course of the pandemic for countries around the world. For example, Singapore, Taiwan, and Israel seem to have balanced all three. China prioritized saving lives until October 2022, at great cost to individual freedom. In Japan, three different prime ministers dealt with the COVID pandemic: Shinzo Abe (9 months), Yoshihide Suga (12 months), and finally Fumio Kishida (18 months and counting).

December 2019 to September 2020: The Abe administration's response.

The Abe administration's centre of gravity prioritized the lives and health of Japanese nationals. At the start of the pandemic, Japan was not as prepared as it could have been. Aside from a few medical officials, the Japanese government did not take the threat of severe pandemics seriously. Countries such as Taiwan, Hong Kong, and South Korea had previously experienced SARS and MERS outbreaks and were better prepared. However, Japan had no confirmed cases of SARS or MERS and was not ready for worst-case scenarios.

Japan's early surveillance was effective. On January 15, 2020, officers from Japan's National Institute of Infectious Diseases detected the first COVID case in Japan—only the second reported case outside of China. In 2019, while preparing for the Olympic games, Japan developed a surveillance system for infectious diseases, and it worked quite well in this case.

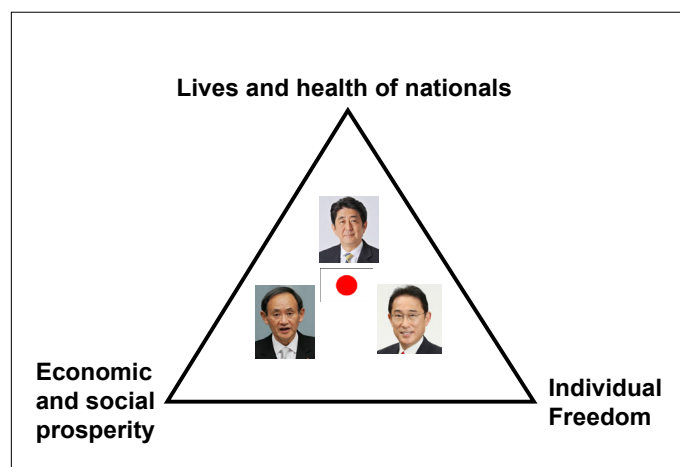
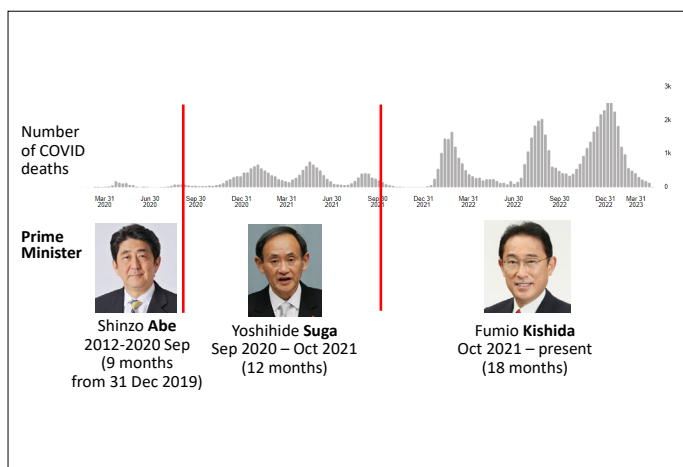
The first major challenge for the Abe administration was extracting Japanese citizens from Wuhan, China, following that city's lockdown on January 23, 2020. On January 28, the Japanese government classified COVID-19 as a "designated infectious disease" under the Infectious Disease Control Law, and gradually put prescribed border control measures in place.

In February 2020, the Diamond Princess posed another

major challenge. A British-registered luxury cruise ship, the Diamond Princess carried 3,711 passengers and crew. One passenger disembarking in Hong Kong on January 25, 2020, tested positive for COVID. Then, on February 3, 2020, the Diamond Princess arrived in Yokohama. Health, Labour, and Welfare Minister Katsunobu Kato was shocked to learn at that time that 10 out of 31 passengers tested positive. This suggested there could be more than 1,200 cases on board. The Cabinet soon found that it was impossible to find a facility that could accommodate all 3,711 people under proper quarantine conditions. Unprepared for such a situation, hotels refused to take them, so the government decided to keep them on board the ship. Passengers who tested positive were sent to hospitals far from Yokohama, although many hospitals were also reluctant to take patients suffering from an unfamiliar and highly contagious virus. The Japanese Self-Defense Forces and infectious disease specialists were tasked with supporting the operation on the ship. Ultimately, 712 passengers and crew members were confirmed to be infected, and 13 died.

The Diamond Princess received a lot of negative attention in the international media. In Japan, it was a wake-up call for the government and the public. The ship offered early evidence of airborne and asymptomatic transmission, and showed just how stealthily and quickly SARS-CoV-2 could spread, especially indoors. Dr. Carter Mecher, in a field report filled with data from the ship, said, "I can't understand why no one is paying attention to this [source of information]. It's a gold mine." It was also an early warning of what would happen when the virus reached the United States, as described in Michael Lewis's 2021 book, *The Premonition*.

In Japan, experts quickly recognized that the public needed actionable knowledge about how to avoid high-risk situations and prevent new infection clusters from forming. This led to the "Three Cs" campaign, which was blasted across social media and helped build public trust. Japanese citizens were urged to avoid the "Three Cs": closed spaces, crowded places, and close-contact settings. Notably, the "Three Cs" campaign included a strong focus on preventing aerosol spread. Japan's public health leaders clearly communicated



that SARS-CoV-2 was an airborne pathogen and emphasized ventilation months—even years—before other jurisdictions did so.

Japan's Universal Health Care system provided a strong foundation for effective responses. For example, Japan deployed contact tracers to prevent clusters from growing. Contact tracing was highly effective but was limited by old technology. Contact tracers were not connected digitally, and many doctors used fax machines for public health reporting. PCR³ testing was not widely available in Japan, but CT scanners were. This healthcare capacity made it relatively easy for doctors to find cases by referring patients for CT scans.

Elder care facilities were also quick to respond. They began putting countermeasures in place in January–February 2020. These facilities were reasonably well prepared because they were used to dealing annually with influenza and other respiratory diseases. In late January 2020, the Ministry of Health, Labour, and Welfare provided guidance for elder care facilities to limit family visits and manage patients in separate rooms.

In April 2020, Prime Minister Abe declared Japan's first state of emergency. The government provided economic support to citizens and businesses, and requested that citizens stay at home.

In summary, although Japan could have been better prepared at the beginning of the pandemic, the Abe administration's initial response emphasizing saving lives was largely effective. The Diamond Princess served as a wake-up call, and the “Avoid the Three Cs” campaign empowered citizens with actionable knowledge to reduce airborne transmission.

September 2020 to October 2021: The Suga administration's response.

Formerly Chief Cabinet Secretary under Prime Minister Abe, Suga became Prime Minister in September 2020. His administration shifted the centre of gravity from saving lives toward securing livelihoods. The Suga administration was still concerned with preventing the spread of COVID-19,

but was also eager to reboot the economy. As a result, it gradually lifted national and international restrictions. It also continued promoting the “GoTO Travel” campaign, which had started under the Abe administration, to encourage domestic tourism, despite surging infections. Many local governors welcomed this campaign, although the government of Tokyo prefecture was reluctant.

By the end of 2020, COVID had spread widely among major cities' entertainment districts, and then to smaller cities, homes, and workplaces across the country. With 4,500 confirmed cases and growing pressure from local governors to do something, Prime Minister Suga declared Japan's second state of emergency in January 2021. This would last until March. With the Alpha and Delta variants of the virus spreading, Japan closed its borders once again.

During this period, Prime Minister Suga pushed to ramp up the vaccine rollout. Japan started vaccinating two months after the United States, the United Kingdom, and Europe, partly because of the demand for Japanese clinical trials. Vaccination began with medical workers, and then the elderly. It took a whole-of-government approach to achieve the goal of providing two doses to elderly people who wanted to be vaccinated by the end of July 2021. In hindsight, the approach worked well. The vaccination rate among elderly people was high. Nonetheless, the number of infected and seriously ill patients continued to increase.

At the same time, Japan engaged in international vaccine diplomacy. For example, Japan co-hosted the COVAX AMC⁴ summit in June 2021, and helped secure US\$9.6 billion from donors. Japan also donated vaccines to countries around the world and took action to address other countries' vaccine storage and transportation infrastructure deficiencies. Many vaccines needed to be kept very cold, and this posed a challenge. In some cases, vaccines were even destroyed because of insufficient transport and storage capacity. Japan provided “last one mile support” by providing cold vaccine transportation boxes that could be powered from a vehicle's cigarette lighter. Japan's Toyota Tsusho Corporation

³ Polymerase chain reaction.

⁴ Advance market commitment.

also developed refrigerated Land Cruisers, which helped deliver vaccines in countries such as Ethiopia.

In July 2021, Japan finally hosted the Tokyo 2020 Olympic and Paralympic games, which had been delayed by a year. This involved severely limiting the number of travelers who could attend, daily testing, and a bubble for participants. Among 11,300 athletes and 464 accredited stakeholders, there were only 33 positive cases. However, while the Olympic bubble was largely successful in containing COVID's spread, the Delta variant continued to spread outside of the bubble. By September 2021, facing low Cabinet support, Prime Minister Suga decided to step down.

In sum, the Suga administration's centre of gravity shifted from saving lives toward protecting economic and social prosperity. The GoTO Travel campaign continued, even in the face of rising infections. The administration also proceeded with hosting the Olympic and Paralympic games. Although a successful vaccination campaign offered some protection, the Alpha and Delta variants continued to drive up both infections and fatalities.

October 2021 to the present: The Kishida administration's response.

Based on the experiences and lessons learned from the Abe and Suga administrations, the Kishida administration has continued to emphasize rebooting the economy. However, the Kishida administration's centre of gravity has also shifted toward individual freedom.

Soon after Prime Minister Kishida took office, the first Omicron variants began spreading around the world. The Kishida administration followed the path of other countries and began normalizing "living with COVID." For example, it announced it would downgrade COVID-19 to a Class V (common) infectious disease. It also began encouraging Japanese not to wear masks. Fortunately, the Japanese vaccination rate, including booster shots, remains very high.

Overview

In summary, the three prime ministers who have had to deal with the COVID-19 pandemic each embraced a different centre of gravity: the Abe administration focused on preserving life; the Suga administration focused on promoting prosperity; and the Kishida administration has been emphasizing individual freedom. However, there has also been a degree of consistency across all three administrations. Each administration has needed to engage in agile decision-making, but there have been no dramatic policy reversals.

One interesting development is the forthcoming Infectious Disease Crisis Management Agency. Prime Minister Kishida will establish this Agency in the Cabinet to help integrate policies. Over the last three years, several issues could not be handled by individual ministries. Instead, it was necessary to mobilize officials from different offices. For example, extracting Japanese nationals from Wuhan, procuring personal

protective equipment, managing the Diamond Princess crisis, managing border control, and rolling out vaccines, all required a whole-of-government approach.

Following recommendations from an expert COVID policy review, the new Agency has been authorized by the Diet and is planned to launch in the fall of 2023. If the Agency is able to institutionalize high-level policy coordination and improve science-based communications and policymaking, it may increase Japan's capacity to manage future health crises.

On the other hand, while Japan's overall COVID response has been decent compared to many other countries, there is a risk that Japan will forget the lessons of the pandemic and become complacent in the rush to get "back to normal." The next health crisis is certain to arrive, and Japan must make sure it is sufficiently prepared.



Following Mr. Sagara's presentation, the forum participants returned to a lively discussion.

First, Mr. Sagara was asked about China's performance. It looked like China had "won" the battle against COVID early on. The Chinese model of high-handed lockdowns and limited transparency of information seemed to be working. China also gave its citizens hope, albeit by telling consistent lies. China was therefore able to represent its "superior" performance in the pandemic as evidence of the superiority of the Chinese model of governance, and this may well have had geopolitical implications. Every regime has different preferences, so how can we compare different countries' performance if they all use different metrics? Mr. Sagara agreed that China did indeed seem to be "winning" until October 2022. Then the situation shifted very suddenly and it became apparent that China was not doing well at all, even by its own standards, which emphasized low infection rates. Indeed, we still do not know what the real Chinese caseload was at any point. The United States, in contrast, did not prioritize low infection rates and lost many lives because Americans prize individual freedom. In this respect, it was an outlier globally, which clearly limited its ability to leverage its pandemic response as soft power geopolitically.

Dr. Emanuel also responded to this first question, suggesting that we look at China's response to the pandemic through four different lenses. The first was the "Triumph of Chinese Science" narrative. China wanted to be seen as the victor in the vaccine race, and denigrated American-made mRNA vaccines accordingly. However, China failed; the Sinovac vaccine is nearly worthless. China lags far behind the United States and Britain in vaccine technology. Second, while China prevented a lot of deaths until 2022, their GDP dropped tremendously during the pandemic, and people also suffered as a result of this. Many companies and countries around the world now believe they cannot rely on China as a producer. Third, in terms of mortality and excess deaths, we

do not know the data. There are plenty of rumours. Finally, there is political unrest. The Chinese public was getting very angry at the regime for its “Zero COVID” policy, prompting it to pivot very suddenly.

Next, a participant asked how the pandemic might affect Japanese social, cultural, and philosophical attitudes. Japan has a long tradition of philosophers who have emphasized that death is always close to life. However, many Japanese people had forgotten that death is so close to us. It seemed possible that the pandemic would help us to remember that death could come to any of us at any time. Perhaps we would return to a more simple and more philosophical approach to life. But the “roaring 20s” seem to have returned, with revenge consumption rampant. Will we forget about our experiences over the last three years? In response, Mr. Sagara suggested that one reason why mortality under Prime Minister Kishida has been much higher is because elderly people became physically frail during preceding periods of isolation. For vulnerable people like them, COVID is not over. Japan’s overall mortality numbers are quite surprising—they are much higher than they were with the Tohoku earthquake and tsunami. Although many of us are now enjoying a centre of gravity that emphasizes individual freedom, that is not the case for people who are still vulnerable to COVID.

Next, a participant observed that, before the pandemic, it seemed like global health governance was working quite well. Then the pandemic hit, and major health governance organizations—including the WHO and the CDC—gave terrible advice. This had catastrophic results. It seems like Japan crafted its own independent response, despite the WHO’s flawed guidance. Is this evidence of a broken system, or just a matter of individual failures by the people inside the system? Mr. Sagara pointed out that multilateralism had been severely damaged by former U.S. President Donald Trump and by Russian President Vladimir Putin. At the same time, governments and national leaders came to expect too much of the WHO. Before the pandemic, how many of us even knew the name of the director-general of the WHO? Regardless, the pandemic clearly showed that there was significant room for improvement in global health governance. Dr. Emanuel agreed that the WHO failed badly. This was partly a structural and financial problem, related to how the WHO is governed and what it understands its mandate and culture to be. The organization’s priorities can be too easily shaped by the countries and foundations that fund it. The organization is also too technocratic. COVAX was needed, but the COVAX rules were a disaster. However, we need the WHO, and we need it to function better. How do we get the structural reform we need? Maybe a “pandemic treaty” will help. Another participant agreed that the WHO’s problems could be attributed to certain member states, including the United States, Japan, and certain European countries. For the WHO to perform more effectively, key members states must work harder. Other participants then observed that international

organizations (IOs) are always difficult to reform. Ultimately, the member states and IO leaders are responsible for running organizations and driving meaningful reform. However, there are always structural problems. It should also be noted that the WHO was making efforts at reform even before COVID started. This required seeking support from many countries, including China. After the pandemic broke out, however, the director-general’s reluctance to offend China compromised the WHO’s ability to communicate effectively about the pandemic. This was a huge mistake.

The next participant asked two questions. First, they observed that Japan’s border controls were very strict compared to other countries. Nonetheless, it has been reported that approximately 90 percent of Japanese people still support that approach. Would Japan likely do something similar in the future? Second, what is the relationship between social norms and information? Social norming often takes time to develop. However, in Japan and other Asian countries, you could watch dry information from government officials on television and the next day people would immediately follow instructions very strictly. So, there seemed to be a very tight relationship between information, trust, and social norming. New information would immediately become the new standard for how people should behave. Is this unique to East Asia? Mr. Sagara agreed that although Japan’s domestic restrictions were soft, the border lockdowns were quite strict. The wording was also problematic. There was an assumption that if you just closed the border, you could stop anything. Almost no government leader understood that it was impossible to rely on border measures alone to stop the pandemic. On the question of social norming, there is certainly strong peer pressure in Japan that may have increased the effectiveness of Japan’s COVID response.

The next commenter observed that Japan’s federal system made it difficult for the country to respond to the pandemic. The central government did not have much power. Conversely, local authorities had a great deal of power. City mayors, for example, had the authority to implement testing requirements. It is also the responsibility of local governors to prepare health facilities and beds. This dynamic gave Prime Minister Abe a lot of trouble. The three prime ministers gradually expanded their powers by amending existing laws and interpreting them in a way that would expand their powers. Of course, some governors objected to this expansion of central power. When the next pandemic strikes, perhaps Japan will have to give even more power to the central government. Mr. Sagara observed that relations between central and local governments are challenging in many countries, including the United States. Also, the bigger the country, the harder it can be to find a balance between the three points of the trilemma. Dr. Emanuel added that he agreed regarding the challenges of federalism. Federalism makes it very difficult to collect and manage data, stockpile emergency supplies, and manage resilient supply chains. This is a problem in the

United States, Japan, Germany, Canada, and elsewhere. One additional problem in the United States is that federal politicians give out money to states without placing appropriate conditions on it.

Next, Mr. Sagara was asked how we should interpret the rapid growth in excess deaths in 2022. There were approximately 60,000 unexplained excess deaths in 2022. Relatedly, Japan still has very limited testing capacity, despite the three prime ministers stating that they were very eager to increase it. Why has it been so difficult for Japan to build its testing capacity? Mr. Sagara replied that testing capability is a core capacity for pandemic response. One lesson of the pandemic is that the Minister of Health needs to strengthen Japan's testing capacity. The Japanese government also needs to invest in knowledge management, including policy reviews, the development of guidance, and training to keep the knowledge management cycle moving, including with testing. Health specialists need to keep their knowledge fresh. Regarding excess mortality, one factor may be that elderly people who were isolated became severely weakened and frail. Once you lose mobility, it is hard to regain it, and you become more vulnerable to other causes of death. Dr. Emanuel agreed that there are likely a lot of deaths that may not be classified as COVID deaths on the death certificate but were still related to COVID. These include frailty deaths where people have become weaker, as well as heart attacks and cancers where people have not gone to get treatment in time.

Another participant then shared several observations about learning the “wrong lessons” from major crises. Japan had “learned” from the H1N1 pandemic that border control worked. Since leaders believed this, they relied too heavily on it and did not prepare other important pandemic

response capacities. We saw a similar attitude with nuclear disaster preparation before Fukushima in 2011: there was a belief that nuclear power plants were safe, that they were sufficiently regulated in Japan, and that there was no need to prepare for high-impact risks and worst-case scenarios. Similarly, the relative success of the “Three Cs” campaign has allowed people to pretend that testing is not necessary. While most people are willing to test if necessary, many acted as though, if they followed the Three Cs, they would not get COVID and did not have to test. To some extent, while many Japanese people understood that COVID is airborne and can be asymptomatic, they did not want to know if they contracted it and used the Three Cs to avoid having to find out. Conversely, in the United States and Europe, there was some misunderstanding about the role of tests, partly because of failures by the WHO and other public health leaders. Testing was sometimes treated like a solution all by itself. Of course, testing is not a solution; it simply generates data. The question is what we do after testing. Without contact tracing and isolation measures, testing has little independent value. Mr. Sagara agreed.

Dr. Emanuel closed the session with one final observation: there are circumstances where data transparency can hurt. There is always debate in the scientific community; this is important for expanding the frontiers of knowledge. However, without effective communication and a fairly sophisticated baseline level of knowledge about such things as epidemiology and statistics among the general public, observing scientists argue with each other can generate a lot of uncertainty and anxiety. At the same time, reducing transparency risks damaging public trust. It is hard to know how to navigate this paradox.

Reexamining Japan in Global Context

Global Pandemic Response

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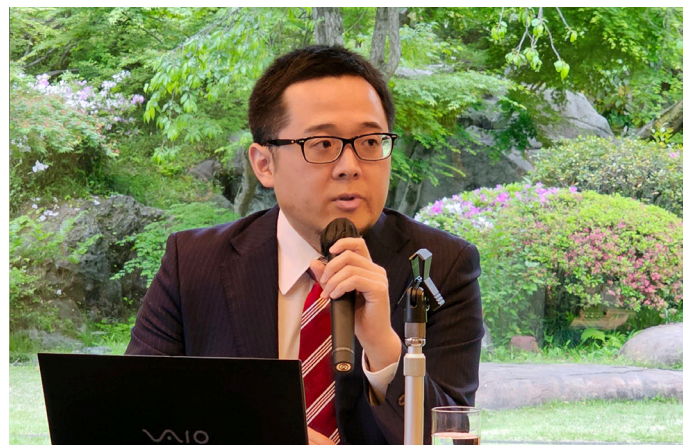
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