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Reflections on pandemic governance in Japan

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1. Introduction—governance mechanism of Japan

Since the first case of infection appeared in China, an emergency management system was immediately activated by the Japanese government to respond promptly to all matters of public safety. From the start of the emergency management system to the declaration of state of emergencies, the Japanese government introduced corresponding emergency measures in regard to the different stages of the outbreak. This series of successive epidemic prevention initiatives characterizes the governance mechanism of the Japanese government’s emergency management.

1.1 Health emergency governance and service agencies

Japan’s health emergency governance system has the Cabinet Prime Minister as the highest commander and the Cabinet Office is in charge of the overall liaison, coordination, and other decision-making bodies such as the Security Council, Cabinet Meeting, and Central Disaster Prevention Council (responsible for formulating crisis response plans). This is a comprehensive organizational system in which various departments such as the Department of Security, Coast Guard, and the Fire Department coordinate and cooperate according to the type of situation or crisis (Editorial Committee of Standardized Management Practices of Sanitation, 2006, p. 261). At present, Japan has a three-level vertical public health emergency governance agency at the Ministry of Health, Labour and Welfare, prefectures, and municipalities. It has also established a national and local emergency governance system for public health emergencies (Xiaobo, 2020).

a. Governance System at National Level
Japan’s Ministry of Health, Labour and Welfare (MHLW), as the national health administrative agency, was originally named the Ministry of Health and Welfare which was first established in 1938. It merged with then Ministry of Labour in 2001 and was reorganized as the Ministry of Health, Labour and Welfare. Its department is in charge of health care and social security in Japan. MHLW has eleven bureaus which include the Medical Administration Bureau, the Health Bureau, the Medicine, Life and Sanitation Bureau, and the Labour Standards Bureau (Committee Sanitary, 2006). In the health sector, it covers the medical services and drug price management of the MHLW, National Development and Reform Commission, medical insurance of the Ministry of Labor and Social Security, medical assistance of the Ministry of Civil Affairs, and border health and quarantine of the General Administration of Quality Supervision, Inspection and Quarantine. This kind of functional setting of the MHLW enables the department to effectively manage the supply and demand of the health system, financing level and cost control, investment, and cost as a whole. These become essential for it to formulate and form an overall plan (Liping & Qinghua, 2011).

b. Governance System at Local Level

Most of the health administrative agencies in prefectures are independent health bureaus, with multiple institutions such as the Medical Affairs Department, the Pharmaceutical Department, the Health and Prevention Department, the Food Hygiene Department, and the Pollution Department. In addition, according to the “Regional Health Law” all cities and districts under the prefectoral health bureau must establish health centers, whose jurisdiction includes Japan and all citizens. These health centers popularize regional health care and vital statistics, improve food nutrition and food hygiene, maintaining residential environmental hygiene, maintaining public health and public medical care, and preventing infectious diseases to protect residents’ health (Kaneko, 2004). Meanwhile, it is stipulated that “health centers need to go to residential areas, schools, and other areas to issue notices, carry out daily disease prevention work, and educate Children develop and maintain good living and hygiene habits” (Yang & Lu, 2003, p. 135). In Japan’s local health emergency governance system, health centers are a major feature. The health center is a public health administrative organization that plays a leading role in public health prevention work. Japan’s “Regional Health Law” stipulates that health centers are the “bases” for responding to public health emergencies in their jurisdictions and must fulfill the statutory duties of emergency management entities (Kaneko, 2004). The law particularly emphasizes the important role of health centers. Health centers are established in prefectures, and are mainly responsible for local medical care, infectious disease prevention, information dynamic statistics, supervision of food nutrition and food hygiene, and maintenance of territorial public health and safety (Yongming & Lan, 2007). For health-care needs, there are regular visits to residents’ residences, universities, colleges, primary and secondary schools, and other places in the jurisdiction to undertake health information collection, disease prevention notices, public health safety education, and other tasks.

c. Community Governance at the Grass Root Level

Public health knowledge and emergency management education is the basis for a country to properly prevent and respond to public health emergencies and crises, and it is an important guarantee for people’s lives and health. Good public health knowledge and emergency management education can not only reduce the probability of public health emergencies, but
can greatly reduce losses caused by public health crisis events. Due to Japan’s geographical and natural conditions, earthquakes, volcanic eruptions, and other natural disasters frequently occur, which have caused the Japanese government and people to have a strong sense of crisis. Therefore, Japan attaches great importance to public health knowledge and emergency response measures from the early stage of public health system and education. Specifically, after World War II, Japan increased its efforts to continuously improve public health knowledge and emergency management education system. Nowadays, Japan has a sound knowledge of population-based public health and emergency education system, government departments and community groups through various forms such as disaster prevention drills, education and knowledge creation of public health, preparations of emergency manuals, and the utilization of multimedia through a variety of ways such as satellite TVs. These efforts provide knowledge through simulations to enhance public health, disaster prevention, and disaster avoidance (Shichun, 2009). Outputs from these enhance public awareness on crisis, and clearly stipulate the status of Japanese public television stations in the national public disaster prevention system through legal means.

In addition, the most prominent feature of Japan’s public health knowledge and emergency education system is that it does not only set up public health management and other related majors in higher education, but also includes public health disaster prevention education in the basic curriculum of Japanese primary and secondary education. For example, in the report “Strengthening the Disaster Prevention System for Schools Against Natural Disasters and Promoting Practical Disaster Prevention Education” issued in December 2019, efforts are made to reexamine school safety plans, crisis management manual, through school and family that are based on three aspects of “School Health and Safety Act measures, flood prevention laws, and tsunami disaster prevention area construction related Laws.” These and other measures provide cooperation and collaboration between families, regions, related institutions, and other stakeholders (Ministry of Education, 2019).

1.2 Characteristic of Japan’s governance mechanism

a. The first characteristic of the governance system in Japan is the lead role played by both national and local governments in unifying policy and command.

The Japanese government has developed a combination of vertical and horizontal emergency management systems because of its experience in dealing with disasters. Vertically, both the national and local governments have disaster prevention conferences, which play a role in planning and coordination in the event of a crisis. Horizontally, different ministries and agencies related to the characteristics of a disaster have formed a common disaster response network and are working together under the guidance of the “Extraordinary Disaster Countermeasures Headquarters” or “Emergency Disaster Countermeasures Headquarters” established by the Cabinet. Since the “Peace Constitution” established by the United States after the world war, Japan provides for a high degree of local autonomy (House of Representatives, 2020) and gives the ability of local governments to play leading roles in the front line of disaster response. For example, Hokkaido was the first to enter a state of emergency on February 28, 2020, which helped to contain the spread of the epidemic in the early stages.

b. The second characteristic of governance system in Japan is its existing and constant revision of legislations.
Legislation is one of the features of Japan’s emergency management mechanism as the laws and regulations highlight responsibilities at all levels, necessary measures, financial support, penalties for noncompliance, implementation limits, etc. They are made in detail and revised in a timely manner in response to changes in the disaster situation (Guilan, 2010). These were essential to the response to the COVID-19 pandemic. On January 28, 2020, COVID-19 was considered a Class II infectious disease based on the law on Infectious Diseases. On March 10, the Law on Special Measures against Infectious Diseases was amended to include COVID-19 in the scope of application. In addition to providing a legal basis for epidemic crisis response, the law also places the crisis management process under strict legal supervision, effectively preventing excessive public authority and ensuring the proper functioning of the state and social order.

c. The third characteristic is the conscientious completion of “Self-restraint.”

Unlike China, Singapore, and some European countries that introduce mandatory “lockdown” policies, Japan’s “emergency state” in metropolitan areas is not mandatory but is merely an appeal from the national government to local governments, which can flexibly adapt to the situation. Fortunately, Japan’s long history of building disaster crisis management mechanisms has fostered an awareness and culture of disaster prevention and mitigation among the public. The Japanese Infectious Diseases Law stipulates that scientific protection against infectious diseases and compliance with policies are basic requirements for citizens. The Japanese government at all levels also attaches great importance to educating the public about protection and raising their awareness of epidemic prevention on a regular basis. For example, since 2016, the Cabinet Office has hosted the National Conference on Disaster Prevention Promotion every year, inviting participants from various sectors, including government, industry, academia, NPOs, citizens’ groups, and the public, to join in the presentations, symposiums, booths, and hands-on workshops to educate people about disaster prevention. During the COVID-19, the public complied with the “Self-restraint” requirement and voluntarily reduced the times going out, businesses also closed voluntarily, so that the number of infected people in Japan during the “emergency state” was effectively curbed, slowing the growth curve. According to the Japan Foundation’s 25th Survey of 18-Year-Old Awareness: COVID-19 and Society, 87.4% of the respondents canceled most of their outings during the “self-restraint” (Nippon Foundation, 2020).

d. The fourth characteristic is the timely release of early warning and related information.

The Japanese government attaches great importance to the detection of health crises and requires nationwide cooperation to quickly integrate information collected from border quarantine, medical institutions, scientific research, foreign agencies, and local governments, and to have it screened and confirmed by the Ministry of Health, Labour and Welfare’s administrative integrated system (WISH). Based on the information provided by the system, the health crisis management department makes a judgment on the public health risk situation and makes timely recommendations for issuing an early warning. During COVID-19, the MHLW contacted health authorities nationwide on January 6, 2020, just after the World Health Organization (WHO) alerted them of the COVID-19 outbreak, and has since continued to update information and data of COVID-19, as well as information on the testing and medical procedures, on official websites such as the MHLW and its official accounts on social media such as Line, to ensure that citizens are aware of relevant information and policies.

e. The fifth characteristic is the comprehensive fiscal and financial support policies.
In order to avoid a major impact on people’s lives during the “self-restraint” period of the emergency state, the Japanese government, in addition to strengthening the protection of medical supplies, also focused on strengthening financial support for affected industries and people, as well as material security for affected supply chains, and introduced a series of comprehensive fiscal and financial support policies, providing convenient measures for businesses and individuals in terms of tax and social security payments, and providing strong financing support policies for small- and medium-sized enterprises that were greatly affected by the epidemic, in an effort to reduce the impact of the emergency on people’s lives and the economy.

f. The sixth is the operation of the hierarchical medical system.

When the “interwater countermeasures” that attempted to block the epidemic from the national gate were no longer possible, the Japanese government’s top priority was to ensure the effective operation of the hierarchical medical system and prevent the collapse of the medical system due to the phenomenon of medical overcrowding. Japan established a relatively complete three-tier medical treatment system, and the number of private hospitals and clinics far exceeds that of public hospitals, but patients can be reimbursed by the national health insurance system at any medical institution (Ministry of Health, Labour and Welfare, 2020b). In addition, Japan has the highest number of hospital beds per 1000 people in the world with more than 13 beds per 1000 people (Ministry of Health, Labour and Welfare, 2020a). After the COVID-19 outbreak, the Japanese government also made provisions for the transfer of infectious disease hospitals to general hospitals after exceeding their capacity.

What’s more, Japan attaches great importance to crisis management collaboration across a wide range of regions, including the sharing of disaster information, the provision of relief supplies and equipment, medical personnel, and evacuation sites. During the COVID-19, the Ministry of Health, Labour and Welfare stated in the second edition of the “Preparation of an inpatient medical care system in the event of a significant increase in the number of patients with COVID-19” that a transfer system between neighboring prefectures should be established if necessary (Ministry of Health, Labour and Welfare, 2020c), in response to the shortage of infectious disease hospital beds in many places during the outbreak period. Therefore, the smooth operation of the medical system will be the key for the execution of the governance system that has prevented the whole country from uncontrollable COVID-19 outbreak.

2. Application of governance system of COVID-19 in Japan

In response to the COVID-19, Japan has generally adopted the “Sendai Model” with “limited security” as its basic feature. The so-called “Sendai model” refers to the antiepidemic plan proposed by Professor Hitoshi Oshitani of Tohoku University in Sendai City, Miyagi Prefecture, Japan. His views have been adopted by the government and serve as the basic model for Japan to respond to the COVID-19. Unlike the early, rapid, and violent outbreak in China, the COVID-19 epidemic situation in Japan is generally been more slowly.
2.1 Japan’s pandemic timeline

The epidemic of COVID-19 in Japan has two waves according to the genomic result of the virus that is prevalent in Japan in 2020. Genetic studies at the National Institute of Infectious Diseases identified the first wave of mutant strains started from the Wuhan group, which is commonly seen in Chinese and East Asian patients. It entered Japan in January 2020 by means of travelers and other returnees from China and in March the same year, it generated many infected populations (clusters) throughout Japan. A medical examination in Japan confirmed that the first case of infection in Japan was a man living in Kanagawa Prefecture who returned from Wuhan on January 16. The virus strain based on the Diamond Princess, whose full-scale quarantine began on February 5, had not been detected as of April 16. This period was deemed as the first wave of infections in the country.

This wave was followed by a second wave of outbreaks from European mutants dating back to earlier cases in Sweden, France, Italy, and the United Kingdom. In Japan, a government panel of experts came to the conclusion that a new epidemic among travelers and returnees from Europe and the United States was likely to occur between March 11 and March 23. The second wave was detected on March 26. The National Institute of Infectious Diseases has provided data demonstrating that most of the viruses prevalent in Japan since March were of European type and had identified the source of infection and close contacts through active epidemiological studies. Japan had succeeded in containing the virus as brought from Wuhan, but due to insufficient restrictions and other measures in March, it allowed the import and domestic spread of the European virus from late March to mid-April 2020. At all this period, most cases were confirmed in big metropolitan areas such as Tokyo, Yokohama, and others. However, a large-scale cluster was confirmed in the rural area in early April and the infection was as a result of a business trip by some residents to the metropolitan area. After the epidemic of European strains, region-specific clusters mutated by one or two bases from European strains and gradually converged in late May. However, the number of infected people started to increase again from the beginning of June, and the frequency and occurrence of clusters were confirmed mainly in Tokyo until July. At the same time, the number of test-positive persons increased in rural areas from the beginning of July. As of mid-June 2020, genomic clusters with a mutation of six bases have been confirmed, compared to European strains (mid-March). Since then, most of the positive patients confirmed throughout the country had genomes. From molecular epidemiology, it was expected to be aggregated in clusters. From June 19, economic activities had partially resumed on the premise of sufficient measures against infectious diseases, but clusters starting from infected people who did not converge started to emerge. It is speculated that, this may have spread all over the country because it was one of the factors that caused Tokyo’s inability to accommodate. The increase in the number of confirmed cases from mid-March to mid-May has settled down, and all emergency declarations issued nationwide were lifted on May 25. The request to refrain from moving across prefectural borders was also completely lifted. Nevertheless, in mid-June, the number of new infections started to rise again in large cities and surrounding areas, especially among young people in their 20s and 30s. The number of infected people increased again from around the end of October and exceeded the peak of the second wave in November. For the first time on November 18, it was revealed that the number of infected people per day exceeded 2000.
2.2 National level application of the “Sendai model” in Japan

On March 29, 2020, the Japanese Society of Public Health held a seminar on cluster infection countermeasures. Professor Hitoshi Oshitani elaborated on the “Sendai model” in the report “Concepts for COVID-19 Countermeasures.” In the report, Oshitani highlighted COVID-19 and its differences with the severe acute respiratory syndrome (SARS). He and a team of researchers analyzed the development trend of the epidemic in China, affirmed China’s antiepidemic countermeasures, and pointed out that, it is necessary to learn from the experience of other countries. Hence, proposed Japan’s antiepidemic measures. Coupled with epidemiological analysis and mathematical model analysis, Oshitani outlined that the large-scale spread of the COVID-19 in a region can be understood from two perspectives: one is the occurrence of continuous cluster infection and the other is that, it was due to large-scale clustering, hence the cause of multiple small-scale cluster infections. For Japan, the factors that may have caused large-scale cluster infections were mainly related to imported patients and contacts (Oshitani, 2020). Based on the abovementioned analysis of the epidemic situation, Hitoshi Oshitani proposed that the goal of Japan’s response to COVID-19 is to minimize the impact on social and economic functions while maximizing the effect of suppressing the spread of infection. The biggest goal of the antiepidemic policy was to curb the spread of infection and reduce the number of severe cases and deaths as much as possible.

The “Sendai Model” believes that, Japan’s antiepidemic countermeasures have three pillars: first, early detection and early response to cluster infections. Secondly, ensuring the provision of medical resources for early diagnosis of patients and intensive treatment of severely ill patients. Thirdly, citizens change behavior and reduce unnecessary outings. For specific countermeasures for cluster infections: first, there should be an arrangement for the infected persons to be admitted to the hospital or take similar measures, conduct 14-day health observations, conduct epidemiological investigations on medical institutions and elderly care facilities, and track the chain of cluster infections, and control its spread to the surrounding area, while suppressing the spread of COVID-19 as much as possible. Secondly, all areas should take necessary countermeasures for cluster infections, and avoid the three conditions of confined space, close contact, and crowded people at the same time (i.e., the “3 elements + α” environment). For areas that are at risk of spreading infection, further practical measures to avoid the “3 elements + α” environment should be taken, citizens would be called on to limit their outings, and medical institutions and elderly care facilities should be taken into consideration to deal with cluster infections. If the infection continues to expand, or the medical system faces an unsustainable crisis, an emergency declaration should be issued and more active measures such as requiring citizens to restrict their outings and restrict the use of facilities should be taken. In addition, as soon as possible, there should be plan to expand the staff of health centers, local health research institutes, quarantine centers, and cluster infection countermeasures. To reduce the burden on health centers, everyone in Japan was to change his/her behavior to avoid the “3 elements + α” environment or reduce unnecessary outings. So far, the Japanese government’s antiepidemic process has been carried out in accordance with the “Sendai Model.”
2.3 Local level application: example of Hokkaido Prefecture’s response to the COVID-19

Japan’s local government can be flexible to adjust to policies that are announced by national government but this depends on the situation. The previous Prime Minister of Japan, Mr. Shinzo Abe, requested on February 27, 2020, that public primary and secondary schools across the country be suspended from March 2. This decision was opposed by many local governments in Japan. Kyoto, Kanazawa, and other places indicated that they would not implement this decision for the time being. Under this circumstance, Prime Minister Abe had to announce again on the 28th that “I hope that schools and localities will make flexible judgments” regarding the suspension of classes (Nihon Keizai Shimbun, 2020). In the face of the COVID-19, the local governments of Japan present a unique epidemic prevention model. In the early stage of the spread of the COVID-19 in Japan, compared with other prefectures, the infection situation in Hokkaido was more serious. Before a state of emergency was declared by Prime Minister Shinzo Abe, the prefecture took the lead by proposing to enter into a state of emergency based on the actual local situation, which was used for containment in the early stages of the spread of the epidemic. There are three main characteristics of the local government’s response.

The first characteristic is the prompt emergency system activation and coordinate departmental cooperation. On January 28, 2020, Hokkaido established the “Hokkaido Infectious Disease Crisis Management Countermeasures Headquarters” and convened its first meeting. After combining the contents from the countermeasure headquarters meeting held in Hokkaido so far, Table 14.1 shows sequence of direction of its response policy.

According to the Counselor, Policy Bureau, General Policy Department, 2020, as of March 24, 2020, the Hokkaido government held 12 times “Infectious Disease Crisis Management Countermeasures” meetings. The main measures include: (1) In the early response period, the Hokkaido government activated various preplanning systems, with the Government Welfare and Health Section as the leading department. It increased cooperation with local medical institutions, health centers, local health research institutes, and other relevant departments to jointly respond to the epidemic. (2) Minimized the impact of the epidemic on people’s lives and social economy. (3) The Hokkaido government issued a state of emergency declaration and requested support from the central government. As of March 19, 2020, Hokkaido announced the lifting of the state of emergency. Furthermore, while continuing to strengthen epidemic prevention and control, it gradually resumed social and economic activities. (4) The Hokkaido government reestablished its countermeasures headquarters in accordance with the amendments to the “Special Measures Law” (Secretariat, 2020). This time, the requests and appeals of local governments to local public institutions and residents had legal effects. On April 17, Hokkaido announced emergency measures and strongly urged people to reduce their outings (Government, 2020b).

The second characteristic is the publishing of real-time information to ensure transparency of the epidemic situation. In response to COVID-19, the Hokkaido government insisted on timely communication and sharing of information. Specific measures included: (1) issue early warnings in a timely manner to attract the attention of all departments. After COVID-19 was listed as a “designated infectious disease” in Japan on January 28, 2020, the Ministry of Health and Welfare of Hokkaido, through the prefectural health center, issued a notice of
response to the occurrence of the disease, including notification standards for designated infectious diseases. At the same time, the Hokkaido government released information to residents to attract attention. For example, released information to the public through the website, set up new coronary pneumonia questioning boards, and created public-oriented leaflets (publishing consultation and consultation standards); comprehensively notified hotel facilities, restaurants, and entertainment facilities to raise awareness of prevention, and at the same time, relied on the Hokkaido Consultation Center for Foreigners to issue notices to foreigners (Government, 2020a). (2) Strengthened information collection and promote multisector cooperation. In the early stage of the epidemic, the Hokkaido government strengthened information sharing among all relevant departments, including the Hokkaido Ministry of Health and Welfare, health centers, medical institutions, and local health research institutes, and strengthened the investigation of confirmed patients and their close contacts (Government, 2020c). (3) Held a press conference for the governor to regularly disclose the current situation of the epidemic. Since February 17, 2020, the Hokkaido government has held regular “Governor Press Conferences” on COVID-19 and published the contents of the meeting on the government’s official website. The content of the meeting mainly included the release of the number and status of confirmed patients in Hokkaido, as well as important government

### Table 14.1

The specific content of the “infectious disease crisis management countermeasures meeting”.

| Date           | Meeting  | Response                                                                                                                                                                                                 |
|----------------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| January 28, 2020 | The 1st time | Start-up plan: Envisaged that the country and Hokkaido will respond to the confirmed patients emerge. Strengthen the cooperation between departments.                                                        |
| January 31, 2020 | The 2nd time | Issue a notice to all residents of Hokkaido, announce the characteristics of suspected symptoms and preventive measures, and call on the public to calmly respond.                     |
| February 7, 2020 | The 3rd time | Various measures have been taken to prevent the spread of the epidemic.                                                                                                                                   |
| February 14, 2020 | The 4th time | Relevant information of the confirmed patients was released.                                                                                                                                               |
| February 19, 2020 | The 5th time | Announce the status of confirmed patients in Sapporo.                                                                                                                                                   |
| February 21, 2020 | The 6th time | Publish relevant information about confirmed patients.                                                                                                                                                  |
| February 25, 2020 | The 7th time | The “COVID-19 team” is established under the “infectious disease crisis management countermeasures headquarters.”                                                                                        |
| February 28, 2020 | The 8th time | The “state of emergency declaration” was issued for the 8th time, calling on people to reduce their outings.                                                                                             |
| March 3, 2020   | The 9th time | Submitted a request to the central government, hoping that the central government would set Hokkaido as a “key countermeasure area.”                                                                    |
| March 10, 2020  | The 10th time | Issued countermeasures in response to the economic impact of COVID-19.                                                                                                                                    |
| March 18, 2020  | The 11th time | The closure of provincial facilities has been extended.                                                                                                                                                  |
| March 24, 2020  | The 12th time | An emergency response to the new crown pneumonia was announced, with a budget of 84.2 billion yen.                                                                                                      |

Source: Made by authors with information from the official website of the Government of Hokkaido [http://www.pref.hokkaido.lg.jp](http://www.pref.hokkaido.lg.jp).

I. Overview and national governance response
policy notices. For example, on February 28, 2020, the Governor of Hokkaido issued the “COVID-19 Emergency Declaration” (Government, 2020a). From Hokkaido’s response to the epidemic, the local governments in Japan have more autonomy. According to the legal provisions on Japanese local autonomy in Chapter 8 of the Japanese Constitution, the basic purpose of local autonomy is to respect local autonomy. In responding to the COVID-19, local governments in Japan will be more flexible in carrying out prevention and control work in a targeted and local context based on the actual situation in the region and the development of the epidemic.

2.4 Community level application: cooperation for the control of COVID-19

In addition to the national and local governments, enterprises, schools, nonprofit organizations, civic groups, experts, and volunteers equally played active roles at all stages of the pandemic (Peng, 2020). In the first stage of the fight against COVID-19, local public health management departments, led by local health centers, played a pivotal role. The local public health management department headed by the health center had not only performed epidemiological investigations of confirmed patients but arranged for suspected patients to undergo polymerase chain reaction (PCR) testing and provided medical consultation and advice services for residents. Furthermore, it had to allocate resources according to the specific conditions of each region before the epidemic spreads across the country, control the spread of the epidemic between regions, prevent the outbreak of cross-infection in large hospitals or designated hospitals, and develop national security in the epidemic situation.

3. Key issues and challenges in COVID-19

In this epidemic, Japan’s ability to effectively contain the spread of the epidemic is inseparable from the smooth operation of the Japanese government’s emergency management mechanism. However, it should be noted that from the perspective of process management, the Japanese government’s epidemic prevention and emergency policies and measures face some challenges. Looking at it from a result-oriented perspective, in terms of the effectiveness of the epidemic prevention, the Japanese government’s emergency management effect during the epidemic is not significant, and it does not show the strong advantages of the mechanism. On the contrary, many controversial phenomena and measures have emerged, exposing the problems of Japan’s existing emergency management mechanism, which is worthy of further reflection.

3.1 The restricted central government

The central government lacks coercive power, and there is a phenomenon that orders are not allowed in Japan. After the World War II, Chapter 8 of the Constitution of Japan stipulated “local autonomy” and promulgated the “Local Autonomy Law” which gave local governments a high degree of independence. Although Japan can be described as a “national system” in terms of crisis emergency management system, the central government is only
responsible for strategic planning. Once specific arrangements are made, the main body of responsibility falls on the relevant government agencies and departments. Emergency declarations for the COVID-19 pandemic lacked coercive force. It is only a guideline and could not “concentrate on major issues” The lack of enforcement power inevitably has the ability to affect the overall prevention and control layout. For example, Prime Minister Abe issued an emergency declaration calling for the complete suspension of primary and secondary schools, but this was rejected by local governments such as Kyoto Prefecture as it is not bidding.

3.2 Outdated disaster information distribution system

Although Japan has established a relatively complete organizational structure for obtaining disaster information, the development of technology for sharing information among various agencies within the organizational, the system is, however, slow. In Japan, hand-written faxes and paper charts are still deeply ingrained in traditional culture. For example, the Tokyo COVID-19 Response Headquarters uses fax machines to summarize the missing information uploaded by various medical institutions, but since the headquarter had only two fax machines as of April, if the number of people diagnosed daily exceeds the upper limit of 300 for fax machines, they will not be counted as new additions on the day, causing serious data errors and misleading the development of the epidemic. In this epidemic, this tradition severely delayed the sharing of epidemiological data among different regions and the central government.

3.3 Slow vaccination

Although the epidemic situation in some countries is still relatively serious, vaccination is being promoted rapidly at the same time. France, Germany, and Canada which experienced initial shortage of vaccine supply have quickly made efforts to catch up. However, a traditional medical powerhouse country such as Japan is far behind. As of the latest data released on May 6, 2021, only 2.4% of Japanese people had received one or more doses of vaccine. Not only does it rank least among the 37 wealthy member countries of the OECD, but it is also significantly lower than Indonesia and Colombia and other developing countries. Since the start of vaccination for medical staff on February 17, 2021, and the start of vaccination for elderly people over 65 from April 12, 2021, only 4.2 million doses have been administered. Most of which are inoculated by medical personnel but with 36 million senior citizens, only 240,000 of them received the first shot.

One may be tempted to ask that, why is vaccination in Japan so slow? This is not because of a shortage of vaccines. The country received 28 million doses of Pfizer vaccine since February, but only one-seventh of them have been used now the phenomenon of low inoculation rate in Japan could be traced back to the country’s vaccine accident in the 1990s where many believed inoculation for measles and other diseases caused series of aseptic meningitis and the court ruling in 1992 that made governments liable for vaccination. Due to the double blow of legal risks and negative government treatment, vaccine factories have gradually declined. These have resulted in slow attitudes toward mass vaccinations in the country.
4. Recommendations for future governance: adaptive governance

Although restrictive governance can alleviate contradictions between responding to an epidemic and ensuring normal social life and economic development to a certain extent, control of a pandemic cannot entirely be attributed to such strict measures. Another way of managing such situations is to create a form of flexibilities in approaches and management practices as found in “adaptive management.” Adaptive is the capability of government to cope with significant adversity or risk. In the era of globalization, governments have limited understanding of some unknown risks. Therefore, it is important for governments to reduce their dependencies on certain strict regulations that do not open the chance to consensus, programs and initiatives capable of absorbing or resisting new risks. Relying on restrict governance approach has the potential to increase satisfactions and cause outrage which in turn can jeopardize efforts to control the current pandemic. Adaptive governance requires the government to adjust its role and change the immutable inertia to quickly respond to risks with an inclusive and prudential attitude. Just as bamboo, government policies must be tough but flexible. Hence, governance systems must gradually improve existing policies and laws, while promoting the formation of a complete and effective prevention and control systems. However, this may also depend on the authority as held by governments and agencies. The Japanese system shows a concentration or power at local governments but other areas with central power also show different outcomes. For instance, China has relatively achieved remarkable results in the fight against COVID-19. As the first country to be affected and impacted by the COVID-19, China has played an important role in the global fight against the epidemic. The most major characteristic of China to fight against the epidemic is the centralized and unified leadership and efficient decision-making.

Although this was successful in China, other countries that implemented centralized measures for the pandemic received other setbacks. Such cases were familiar in Europe and some states in the United States. For instance, the government of the Netherlands beefed up its pandemic lockdown measures by extending curfews in major cities from 9:00 p.m. until 4:00 a.m. in January 2021. However, was met with series of antilockdown demonstrations in many cities including Eindhoven and Amsterdam. Similar demonstrations have concurrently occurred in the city of Paris in France, Berlin in Germany, Illinois, Indiana, Michigan, and many others states in the United States.

Comparing the three scenarios points out three different perspectives. Thus, a system where authority resides in local governments but lacks the power that enforces trick lockdowns, a central power that has the capacity to implement a total lockdown but faced with but stern opposition from the local areas/governments. The indication from these is that, there should always be a balance to all systems that is able to meet all needs while maintaining the core principles and goals.

5. Conclusion

Japan’s government mechanism has played an important role in all crises and has withstood the great test of the COVID-19 epidemic but still needs to be improved. In this epidemic, the government mechanism showed the advantages of the central and local
governments playing leading roles at various stages and capacities. These were complimented by efficient legislations, public “self-restraint” strong financial support, and medical system. These have reflected in a major feature in Japan’s case such that the country focused on cultivating public awareness in which everyone was an important part of emergency management. The emergency management mechanism included both official and private forces working together. On the other hand, the effectiveness of the mechanism has also revealed problems. This notwithstanding, if the Japanese government can further optimize its emergency management mechanism to include shared powers across different levels of government through adaptive governance approaches more could be achieved in the pandemic control due to its existing structure which are contributing immensely to infections control.

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