



The impact of COVID-19 on older persons

Japan country analytical brief

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Highlights

- In Japan, 14% of deaths from COVID-19 were recorded at long-term care facilities as of mid-May. This rate was lower than that reported in European and North American countries as of mid-June – 49% in France; 47% in Sweden, and 45% in the U.S.A.¹
- While COVID-19 outbreaks occurred in medical care facilities, they occurred less in nursing care facilities.
- The possible “side effects” of governmental recommendations for social/physical distancing, especially isolation and lack of exercise, have been a concern for older persons.
- The number of new cases in the second wave that started in July increased after lifting of the state of emergency; however, most new cases were reported in younger populations.
- Heat stroke, which has similar symptoms to those of COVID-19, has made it difficult for health personnel to diagnose patients during the summer season. A similar concern is recognized for flu in the coming winter.
- The rainy and typhoon season started in Japan in June 2020, and evacuation centers were opened in several cases of typhoon and/or flood warnings. Because many people came to the evacuation centers during this time, it was difficult to uphold the prescribed social/physical distancing measures put in the place to curb the spread of COVID-19.

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Changes in national COVID-19 situation

In Japan, since the state of emergency was lifted in May, the number of new cases has been increasing, and the highest numbers were recorded in July and August. The mortality rate among older persons is still high. According to the health ministry, 981 persons had died as of July 15, excluding those from the Diamond Princess ship, and more than 90% of them were in their 60s and older.² However, at least at in the early phase of the pandemic, the number of clusters in long-term care facilities was low³, and even after the state of emergency was lifted, infections among older persons remained low. Therefore, the rate of hospitalized or severely ill patients is still low².

Regarding the number of new COVID-19 cases, the government held a press conference and announced the COVID-19 situation on 13 July 2020. According to the data presented in the press conference, after the state of emergency was lifted, the number of new positive cases increased, while the number of severe cases decreased.⁴ As of July 12, only 6 cases were using respirators, including Extracorporeal Membrane Oxygenation (ECMO), compared to the peak number of 62 recorded on April 27. In August, this number increased again, but it was lower than the peak in April. The second peak was on September 2 (30 cases needing respirators), and on September 24 the number of patients using ECMO was 24.⁵ According to data provided by the government in a press conference, many of the new positive cases were reported in people in their 20s or 30s (around 70%); the number of cases reported in individuals aged 65 years or older was low.⁴ the ratio of patients aged 70 years or older who were infected by COVID-19 during the first wave of COVID-19 (January 16 – May 31) was 20.3%, and during the second wave (June 1 – August 19) was 8.8%.⁶

On July 29, the number of new positive cases of COVID-19 exceeded 1,000 per day⁷, and in August, the number of new cases per day remained high. The cumulative number of positive cases reached 50,000 on 10 August 2020. However, the number of new cases among those in their 60s or older was still low; for example, on August 10, 197 new cases were found in Tokyo, and only 5 cases were of people in their 60s, 7 in their 70s, and 5 in their 80s.⁸ On August 17, the National Institute of Infectious Diseases published the COVID-19 situation as of August 5, and according to their article, COVID-19 continues to spread mainly in urban areas and among the young generations. Therefore, the ratio of hospitalized or severely ill patients is still low. However, the infection in older persons is spreading gradually, and the number of severely ill patients is also gradually increasing.⁹

On July 20, the total number of deaths related to COVID-19 exceeded 1,000, and more than 90% were aged over 60 years. Since the state of emergency was lifted, the number of new infected cases in the younger generations has been increasing, and it is feared that asymptomatic and mildly symptomatic patients could spread the virus to elderly family members and communities. Specifically, 556 deaths were from those aged more than 80 years, 268 deaths were from those in their 70s, and 101 deaths were from those in their 60s.¹⁰

In mid-August, the number of new positive cases remained high, and on August 26, the number of new cases per day reached 200 for the first time in Tokyo. On August 25, Tokyo recorded 182 new confirmed cases. However, infection among older persons was still low; of these 182 cases, 49 were in their 20s, 33 in their 30s and 40s respectively, and 25 in their 50s.¹¹

According to a survey conducted by the National Center for Global Health and Medicine (NCGM), the death rate of hospitalized people between March and June was less than 8%, which is lower than that in other countries (28% in China, 26% in Britain, and 21-24% in New York). The results of the survey showed that those who are at a high risk of severe symptoms caused by COVID-19 are older, and have a history of smoking and with chronic disease. In addition, those aged 60 years or older are at a greater risk of developing severe symptoms and requiring medical oxygen supply or mechanical ventilation.¹²

A research group collected data on cluster cases in Japan from January 16 to May 9. They found that 381 COVID-19 clusters with 3,786 infected cases reported in 42 prefectures. Of these, 176 clusters (46.2% of total clusters) with 2,833 cases (74.8% of cluster cases) occurred in medical welfare facilities, including 66 clusters (17.3% of total clusters) with 1,038 cases (27.4% of cluster cases) in long-term care hospitals/facilities. According to the study, the number of clusters in long-term care hospitals and facilities was significantly smaller than those in general medical/welfare facilities and in non-medical/welfare facilities. However, on the other hand, the cluster sizes (case number in cluster) in long-term care hospitals/facilities were larger than those in other group of facilities.³

Most of the cases in the second wave are reported from the young generation in a relatively large city in the second wave as mentioned above. However, some cases spread to local cities through

certain contacts such as parties and gatherings. In some cases, transmission reached to families, and then family members became infected. In certain cases, transmission got to long-term care facilities, causing multiple cases, including severe or resulting in death.⁹ Preventive measures of outbreak in long-term care facilities are significant issues, even though the morbidity rate of COVID-19 is lower in Japan than in other countries.¹

Key changes in situation of older persons



Health and care

During the state of emergency in April and May, a stay-at-home measure was introduced. The importance of social/physical distancing was repeatedly announced, and people were requested to avoid the 3Cs (closed spaces with poor ventilation, crowded spaces and close-contact settings), even after the lifting of the state of emergency until now. However, the side effects of social/physical distancing have been recognized by specialists, and how to maintain the physical and mental health of older persons under social/physical distancing was discussed.

For example, older persons are at a higher risk of developing severe symptoms after contracting COVID-19. A survey showed that because they worried about being infected by caseworkers, some older persons who needed nursing care had stopped applying for certification in March, to such an extent that by May, applications had decreased by more than 20% in 31 cities, and over 30% in four municipalities, compared to previous year. In Japan, based on the universal long-term care insurance system for people aged 40 and above, older persons who need support for their daily lives need to apply for the national long-term care certification. The certification is done through the outreach assessment by a visiting examiner from each municipality and documentation from an attending physician. With certification, they will receive necessary support, such as financial support to use nursing homes, and day care. It is worrying that older persons suffer from muscle weakness and declines in cognitive function due to the decreasing long-term care.¹³

In addition to relatively healthy older adults, residents in long-term care facilities are vulnerable because of the decline of functions and underlying diseases. Occurrence of clusters in those facilities caused unfavorable consequences, and even multiple deaths. For example, there was a cluster at a nursing home in Hokkaido, in the northern part of Japan. It took more than two weeks to find health facilities that could accept residents who were infected by COVID-19. The number of deaths caused by COVID-19 might increase because of the lack of capacity of health facilities.¹⁴ The Ministry of Health, Labour and Welfare (MHLW) alerted those facilities to strengthen preventive measures and to prepare resources in case of an outbreak.

In recent years, because of global warming, the problem related to heat stroke during the summer has become more serious in Japan. Because many people are wearing masks to prevent the infection of COVID-19, the situation might worsen this year. According to the Fire and Disaster Management Agency, 12,804 people were taken to hospitals for heat-related illnesses from August 10 to 16, which was almost double compared to the number in the previous week. In addition, the symptoms of heat stroke and heat exhaustion are similar to those of COVID-19, and diagnosing if the patient has COVID-19 or heat-related illness is difficult, which puts stress on health personnel.¹⁵

In addition to wearing masks, body conditions may also contribute to heat stroke. According to experts, because of the stay-at-home measures during the pandemic, people exercised and went out less. Due to this, people lack exercise and may have lower muscle mass. Because of this, the body will have difficulty in retaining its functions of lowering body temperature after sweating and in water retention; there will also be an increased risk of dehydration¹⁶.

According to the Fire and Disaster Management Agency, 8,388 people were taken to the hospital because of heat-related illnesses in July, and this summer the number increased by 50% compared to that in July 2019.¹⁷ The older population is one of the most vulnerable to heat-related illnesses. Between 2013 and 2017, approximately half of the patients who were taken to hospital due to heat-related illnesses were aged 65 years or more¹⁸ and 58.5% of the total figure were those aged 65 years or more.¹⁷

Maintaining the balance between social/physical distancing and mental/physical health has become a key issue. As people refrain from going out in these circumstances, the Japan Agency for Gerontological Evaluation Study (JAGES) mentioned the importance of avoiding isolation of older persons through a press release.¹⁹ Several societies related to geriatrics and gerontology in Japan also released statements, such as the Japan Geriatrics Society, which said:

*"We are deeply worried about the pandemic of the new coronavirus infection around the world. It is so sad to hear many people die due to COVID-19, especially older people with comorbidities such as diabetes, cardiovascular disease, lung disease, etc., have a higher risk for mortality. It is of course important for us to avoid the infection, but at the same time we should avoid the secondary effect of self-restraint due to the pandemic. Therefore, the Japan Geriatrics Society has decided to raise awareness of "prevention of frailty" during the pandemic. We are afraid that in some cities and countries going out might be strictly prohibited, so you might have to change the contents of this poster depending on the current situation of your community. We do hope we can overcome this hard time by human wisdom. March, 2020"*²⁰

The Japan Geriatrics Society published a leaflet during the above-mentioned campaign, and recommended older persons to exercise at home, eat a balanced diet, maintain oral hygiene and avoid isolation.

The Japanese Psychogeriatric Society released the following statement:

*"It has been pointed out that older persons are more likely to get severely ill from the novel coronavirus. For older persons with dementia or mental illness, it can be quite difficult for them to take preventive measures on their own, including hand-washing and wearing masks. To reduce the risk of them getting an infection at home, it is important to be careful that family members and carers do not become infected with the virus. In addition, the people who are going to facilities for care services may be concerned about infection risk there. The Ministry of Health, Labour and Welfare, however, has provided detailed notes on preventing the spread of infection. At present, both care givers and care receivers are undergoing considerable stress than usual. Under this circumstance, we concern that various stresses may lead to worsening of people's mental symptoms. We, the Japanese Psychogeriatric Society, will provide full support to patients and their families."*²¹

The requirement of social/physical distancing raises another issue. Considering the impending rainy and typhoon season in Japan and the potential need to evacuate of people at risk, including older persons, the implications of limitations brought by the COVID-19 pandemic have been discussed. In Japan, there are so-called "welfare evacuation centers," which have barrier-free facilities and qualified staff for those who need special assistance for evacuation. However, in many cases, the nursing home is designated as the welfare evacuation center, wherein visitors, including residents' family members, are currently prohibited from visiting to prevent infection of COVID-19. In addition, social/physical distancing is required even in the evacuation center, requiring more space to maintain sufficient distances; therefore, the center cannot accept evacuees up to designated capacity.²² In the case of Typhoon No. 10 in September 2020, even the usual evacuation center could not accept the designated capacity. A municipality even showed the real-time crowding situation of their evacuation centers through their website, and encouraged residents to evacuate to evacuation centers that had not yet become full.²³ In the "new normal" situation, the Japan's government has requested municipalities to turn hotels and inns into evacuation centers, and for residents to consider staying at home if it is safe. However, the residents worry that they cannot get enough information and daily necessities if they stay home.²²

Responses

As mentioned by several societies related to geriatrics and gerontology in Japan, interpersonal connections are important for the wellbeing of older persons. For example, the Japan Agency for Gerontological Evaluation Study found that older persons who have connections with others through the Internet had higher self-rated health and happiness.²⁴ A group of university students in Osaka is even sending letters to older persons who live alone to help them avoid feelings of isolation under the situation of social/physical distancing. The letters were handwritten, and an older person who received a letter said he was happy to receive a handwriting letter.²⁵

Another effort to keep older persons healthy despite social/physical distancing is an app developed for dementia prevention. According to a survey by the National Center for Geriatrics and Gerontology (NCGG), during a state of emergency, only 50 respondents reported engaging in exercise, and the time spent on physical activities per week decreased by around 30%. To overcome this situation, the NCGG has developed a smartphone app to prevent the incidence of dementia, using the government's first supplementary budget for the 2020 fiscal year. The free app, called "On-line *Kayoino-ba* Application" (*Kayoino-ba* are places providing activities for long-term care prevention in the community) shows 50 kinds of home exercises, and users can also create walking routes through the app. The NCGG will add other functions to the app, such as exercise videos while doing word games and math questions.²⁶

In addition to a smartphone application, the NCGG also developed the NCGG Home Exercise Program for Older People (NCGG-HEPOP) Flowchart. They stressed the importance of exercises under the situation of staying at home, and showed this through the NCGG-HEPOP. It is a flowchart that helps older persons to determine appropriate activity plans for the prevention of mental and physical deterioration. The NCGG focuses on physical function, nutrition and oral function, and they included information to maintain oral and cognitive functions.²⁷

Several studies show that in Japan, only 14% of the 1,225 people who died due to COVID-19 in Japan as of August 30 were residents of nursing homes. According to the specialists, this is because the government sent an alert on COVID-19 to nursing homes on January 29, and in mid-February, the government re-sent a warning regarding outside visitors and restrictions on working professionals with fever. Long-term care facilities took the pandemic seriously from the beginning, and restricted access to residence areas, even for family members of residents.

Other factors responsible for the lower mortality rates in nursing homes as pointed out by Japanese specialists are the preventive measures against infectious diseases (influenza, etc.) that had been introduced at the facilities before COVID-19, such as disinfecting hands and taking temperature. The Japanese culture of respecting older persons was also identified by experts as a factor for the lower death rate.^{28,29}

When a cluster occurs at a nursing home or care facility, the local public health center organizes a temporary medical team consisting of nurses working at the facility, infectious disease doctors from nearby hospitals, the Disaster Medical Assistance Team (DMAT) members, and primary care doctors and nurses. Patients are usually cared for at a nursing home or care facility. The medical staff collaborate closely with the hospitals caring for COVID-19 patients, and, if needed, patients are promptly sent to those hospitals. The medical staff share their experiences through online conferences at the grassroots level. Furthermore, the government has recently initiated funding support for nursing homes and care facilities to obtain essential personal protective equipment (PPE) and extra salaries for staff members.³⁰

While the Japanese government is struggling to secure a vaccine for all people in Japan, they have also started to discuss the priority of the vaccination. The government is planning to start COVID-19 vaccination early next year, with priority given to health workers, older persons, and those with underlying health problems.³¹

The "new normal" under COVID-19 requires the people to change their behavior and lifestyle. The Ministry of Health, Labour and Welfare has issued guidelines for nursing care programs. The local governments revise their insured long-term care service plans every three years, and 2020 is a year of revision of these plans. The health ministry revised basic guidelines on nursing care programs so that local governments implement infection prevention plans in nursing homes, including conducting training on infectious prevention for staff and reflecting on revision of an insured long-term care service plan.³²

Endnotes

1. [Japan has the world's oldest population. Yet it dodged a coronavirus crisis at elder-care facilities](#). The Washington Post, 30 August 2020.
2. [Japan's daily coronavirus cases top 1,000 for 1st time](#). Kyodo News, 30 July 2020.
3. [Clusters of COVID-19 in long-term care hospitals and facilities in Japan from 16 January to 9 May 2020](#). IRITANI Osamu et al., Wiley Online Library, 7 July 2020.
4. [The New Phase of Covid-19 Response in Japan \(2020/7/13\)](#). OSHITANI Hitoshi, 13 July 2020.
5. [Changes in the number of Administered ECMO Cases for Critical COVID-19 patients in Japan](#). Japan ECMOnet for COVID-19, accessed 25 September 2020.
6. [Figure 1: Changes in the number of individuals requiring hospital treatment, critically ill individuals, and newly reported cases etc](#). Ministry of Health, Labour and Welfare, 1 September 2020.
7. [Japan's daily coronavirus cases top 1,000 for 1st time](#). Kyodo News, 30 July 2020.
8. [Japan's total number of coronavirus cases tops 50,000](#). The Japan Times, 10 August 2020.
9. [Current Situation of Infection, August 5th, 2020](#). National Institute of Infectious Diseases, 17 August 2020.
10. [Japan's coronavirus death toll tops 1,000](#). Kyodo News, 20 July 2020.
11. [Tokyo coronavirus cases top 200 for first time in three days](#). The Japan Times, 26 August 2020.
12. [Japan sees fewer COVID-19 hospital deaths than other nations: study](#). The Mainichi, 6 August 2020.
13. [Nursing care applications sank in first half amid COVID-19 fears, Japanese survey finds](#). The Japan Times, 27 June 2020.
14. [Deadly Sapporo coronavirus cluster highlights challenges faced by elderly care homes](#). The Japan Times, 2 June 2020.
15. [Scorching Japan heat wave poses challenge to virus-hit medical system](#). The Japan Times, 22 August 2020.
16. [How to beat heatstroke amid coronavirus pandemic](#). NHK-World, 19 May 2020.
17. [Heatstroke sends 8,388 to hospitals across Japan in July](#). The Japan Times, 26 August 2020.
18. [As Japan endures record heat wave, large population of elderly at highest risk](#). The Japan Times, 25 July 2020.
19. [Press Release No: 210-20-1 Suggestions Regarding the Impact of Coronavirus Disease 2019 Epidemic Responses on the Lives of the Older Japanese Population: Review of JAGES studies](#). JAGES, 17 June 2020.
20. [COVID-19, Practice Caution for Older People](#). The Japan Geriatrics Society, accessed 11 September 2020.
21. [For frail elderly people including dementia and their family carers "Response to Novel Coronavirus \(COVID-19\) Infections"](#). Japanese Psychogeriatric Society, accessed 11 September 2020.
22. [Evacuation plans for elderly and disabled people get rethink in pandemic](#). The Japan Times, 26 June 2020.
23. [Editorial: Japan should review typhoon evacuation plans as virus hampers response](#). The Mainichi, 8 September 2020.
24. [Press Release No: 217-20-8: older persons who has connection with others through internet has 1.6 times higher self-rated health than those who do not have connection via internet. \(in Japanese\)](#). JAGES, 8 April 2020.
25. [Osaka students put pen to paper to cheer elderly in pandemic](#). The Japan Times, 20 August 2020.
26. [Dementia prevention smartphone app developed in Japan](#). The Japan Times, 9 June 2020.
27. [Balancing infection control and frailty prevention during and after the COVID-19 pandemic: Introduction of the National Center for Geriatrics and Gerontology Home Exercise Program for Older People Home Exercise Program for Older People 2020](#). OSAWA Aiko, et al. Geriatrics and Gerontology International, 8 July 2020.
28. [How Japan, which has the world's oldest population, has so far managed to keep its nursing homes safe during the pandemic](#). Business Insider, 1 September 2020.
29. [Japanese Approach to COVID-19 is an Amazing Success – There, I Said It](#). Japan Forward, 20 May 2020.
30. [Continuous supporting measurements related to COVID-19 for long-term care facilities \(in Japanese\)](#). Bureau of Social Welfare and Public Health, accessed 12 September 2020.
31. [Japan vaccination priority to include medical workers](#). The Japan Times, 19 August 2020.
32. [Japan to include anti-virus steps in revised nursing care guidelines](#). The Japan Times, 28 July 2020.

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