World view

By Hitoshi Oshitani

COVID lessons from Japan: clear messaging is key

There's no perfect solution to suppress the pandemic, but careful study and communication can empower citizens.

Through six waves of COVID-19 in Japan, the number of cases and deaths per capita has been significantly lower than in other G7 countries. This is despite having the world's oldest population, and being densely packed. Yes, Japan has high vaccination rates, especially for older people, and masking is common. But neither of these is a full explanation. Deaths were low even before vaccines were available, and masks are common across Asia.

Japan has sought to understand the spread and risks of the disease and apply that to minimizing deaths and hospitalizations while maintaining social and economic activities. Trade-offs among these factors can be uneasy. Strong social pressure probably helped to boost protective measures, such as mask wearing, and minimized risky behaviours. Overall, the government quickly equipped its people with information to take protective action and avoided rigid prescriptions.

In 2003, I was the officer responsible for emerging diseases at the World Health Organization (WHO) Western Pacific regional office when the outbreak of severe acute respiratory syndrome (SARS) occurred: it was contained within eight months, with fewer than 1,000 deaths. When I first learnt of a similar coronavirus identified in China in people with pneumonia — SARS-CoV-2 — I thought perhaps the outbreak would follow a similar path.

I soon realized otherwise. With SARS, most people became severely ill. With COVID-19, many cases are mild or asymptomatic — and, unlike SARS, people can spread the disease without being sick. In other words, COVID-19 is far less 'visible' and so is harder to contain.

Japan's constitution prohibits strict lockdowns, so another strategy was needed to suppress transmission. Heading into the pandemic, Japan had more than 8,000 public-health nurses across 400 public-health centres conducting 'retrospective' contact tracing for diseases, such as tuberculosis, to identify how people became infected — and that system was quickly adapted to COVID-19.

By the end of February 2020, scientists had identified many clusters of transmission and realized that most infected people did not infect anyone else, but a few infected many. From my past work, I knew that respiratory viruses are mainly transmitted through aerosols. My colleagues and I looked for common risk factors among superspreading events to come up with a more effective public-health message for the public. It incorporated early indications that SARS-CoV-2 could spread through aerosols.

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This led us to warn against the '3Cs' (*sanmitsu*): closed environments, crowded conditions and close-contact settings. Even as other countries focused on disinfection, Japan promoted this concept extensively, by asking people to avoid high-risk activities such as karaoke bars, nightclubs and indoor dining. People largely complied. A panel of artists, academics and journalists named *sanmitsu* Japan's buzzword of the year in 2020.

Since the beginning of the pandemic, we've tracked how superspreading events differ. Other parts of the world have continued to flirt with 'going back to normal' by totally lifting restrictions, often in service of the economy, only to see cases soar again, with significant numbers of deaths. Simple solutions that help only the privileged and immunocompetent individuals cannot be accepted as a 'new normal' while vulnerable people bear the brunt of such policies. Current data suggest that Japanese citizens are adapting. In late April and early May, Japan celebrated its Golden Week holidays. This year, there were almost no special restrictions on when restaurants had to close or whether they could serve alcohol. Crowds were up, but smaller than in the years before the pandemic, and precautions, such as finding ventilated spaces, were emphasized. In the earlier waves, people would relax as cases ebbed, prompting a subsequent wave. But behaviour after the surge earlier this year seems different, even with no restrictive measures in place.

The situation is becoming more complicated. People are reluctant to accept strict measures, even with the upsurge of cases, because vaccine coverage is high and Omicron fatality rates are lower. There are more interventions available, especially in a high-income country such as Japan: booster vaccinations, antivirals, better clinical care and public-health measures, such as CO_2 monitors to track ventilation in public buildings.

But there is no one silver bullet that can eliminate the virus. Certainly, Japan's response has not been perfect and has received criticism. It is true that the country's initial testing capacity was limited, but extensive testing is not enough to suppress transmission.

Scientists and government advisers have to grapple with the fact that we do not yet know the right balance in the long term. They must understand that the behaviour of both the virus and people is subject to change — and adjust recommendations as such changes unfold.

Often, phrases such as 'exit strategy' or 'back to normal' are used by people longing for the days when we lived without the threat of this virus. But we are nowhere near back to normal. Nations must continue to seek the best balance between suppressing transmission and maintaining social and economic activities. How? By using all the tools at hand as they apply to cultures, traditions, legal frameworks and existing practices, to minimize suffering across the globe.

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