



Preparedness for the next wave of COVID-19 in the Republic of Korea

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As the global coronavirus disease 2019 (COVID-19) pandemic is diminishing, World Health Organization data show that around 50% of weekly cases are in the Western Pacific region, in both hemispheres [1]. Remarkably, no seasonality is apparent and COVID-19 is prevalent in countries where the tertiary vaccination rate is higher than 80%, including the Republic of Korea (ROK), New Zealand, Australia, Japan, Singapore, and Taiwan. ROK has the highest incidence rate per million people, and the stringency index of public measures is one-half to one-third lower in ROK, New Zealand, and Australia than in Japan, Singapore, and Taiwan. China still has a zero-COVID containment policy involving contact tracing, quarantine, isolation, population screening, and vaccination (with a rate over 90%), all of which have led to a low incidence rate [2].

Despite the recent outbreak, ROK's cumulative mortality rate and fatality rate are very low in the global context. The overall management policy is to increase the vaccination rate among vaccination-hesitant individuals and recommend the fourth vaccination to high-risk groups, while taking measures to block transmission, namely, rapid testing, isolation of positive individuals, and the use of masks indoors.

Meanwhile, the revision of COVID-19 measures by the United States Centers for Disease Control and Prevention reflects scientific evidence about the Omicron variant and the current situation in the United States, where public restrictions are minimized due to the high level of immunity from vaccination and infection [3]. Simultaneously, border control has been reduced to the submission of a vaccination certification, and testing is no longer compulsory before boarding and after arrival. Wearing a mask while traveling was also exempted from the compulsory provisions. These changes suggest that it is time to increase investments in other major causes of death that have not received sufficient attention during the pandemic, as the mandatory use of masks and free testing have not controlled the resurgence of COVID-19 and have made a limited contribution to disease control in the United Kingdom. This seems to be consistent with the argument that it is time for policy changes [4].

As the COVID-19 pandemic continues for a prolonged period, countries in the Western Pacific region of Asia are refining their policies based on evidence-based scientific principles. Therefore, information exchange, cooperation, and collaboration between countries are becoming increasingly necessary. Of note, while ROK, Japan, and China still require negative results of viral tests at border control, the United States excludes mandatory submission. In this regard, the Sixth Asia-Pacific Parliamentary Forum on Global Health, which is a very important

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platform, hosted by the National Assembly of Korea with support from the World Health Organization, held on August 24 to 25 in Seoul, brought together parliamentarians to share lessons identified during the COVID-19 pandemic, and discuss solutions, actions, and collaborations for strengthening health security and building resilient health systems for the future.

I would like to propose to Government of Republic of Korea collaborative efforts should be made to create a new Asia Pacific Health Security Initiative (tentative) in which academia and governments work together in the fight against new infectious diseases. At the 31st Meeting of the Technical Advisory Group on Immunization and Vaccine-Preventable Diseases in the Western Pacific Region, held in Manila in June 2022, it was mentioned that COVID-19 vaccines will be accessible in low-income countries in the region thanks to the donation of vaccines, at least during this year. However, if the pandemic continues for a long time, it is predicted that there will be a shortage of COVID-19 vaccines, so I cannot emphasize enough the importance of regional cooperation and the need to develop domestic vaccines.

However, according to Korean government data, the case fatality rate in 2021 and January 2022 of the Delta epidemic was 4% to 5%, but decreased to 0.5% during the first Omicron wave. At present, the fatality rate has decreased to 0.15%, which is considered to reflect the effects of the high vaccination rate. However, even though the vaccination rate for those aged 60 years or older reached 90%, 41.3% of the deaths over the age of 60 were among the 4.1% group who received a single dose or none at all, and 15.7% in the 5.9% who received 2 doses. Therefore, it is necessary to investigate vaccine awareness to increase uptake among these unvaccinated groups. In addition, 43% of all deaths occurred in the group receiving up to the third dose, and antiviral drug prescriptions were only received by 18.7% of them; thus, both prompt antiviral administration and encouragement of the fourth dose among those over 50 years old will prevent deaths in this high-risk group [5].

Evidence-based measures focus on preventing disease and reducing hospital admissions and deaths by raising the vaccination rate among those who have avoided vaccination to date and recommending the fourth dose to high-risk groups. However, some cohort studies have shown that 56% of people infected by the Omicron variant are asymptomatic [6], and the incubation period has shortened to about 3.42 days [7]; therefore, regular screening twice a week would help block transmission through health workers at high-risk facilities. In general, rapid testing for symptomatic or suspicious patients, self-quarantine measures, and wearing masks indoors will also be required. Developing a vaccine in

the form of a nasal spray will also help block viral circulation in children and young adults.

However, above all else, it is necessary to analyze the magnitude and causes of excess deaths due to COVID-19. In 2020, 9,838 people died due to chronic diseases (a 3.3% increase compared to the previous year), despite 950 deaths due to COVID-19. According to the government's press release, 4,400 people died from COVID-19 alone in 2021, and 26,332 deaths have been reported from COVID-19 to date. In data comparing 33 countries in 2020–2021, ROK's excess mortality was estimated to be between 4,630 and 7,529, and when age-adjusted, the estimate of excess deaths was -30,286; however, it is difficult to compare the excess mortality directly [8]. In other words, alternatives should be prepared through an analysis of KOSTAT cause-of-death statistics, with a focus on cancer and increases in deaths due to heart disease, hypertensive diseases, and sepsis. The COVID-19 surge in early 2022 was accompanied by direct or indirect disruption of patient services, including delays in the hospitalization of pregnant women, other critically ill patients, and emergency surgery due to infection control and prevention, and there have been case reports of indirect deaths due to the burden on the medical system, such as the difficulty of managing critically ill patients due to isolation. Through a qualitative survey of hospitals and clinics, health system strengthening, such as the improvement of inpatient facilities, detailed work guidelines, and insurance support plans must be prepared to reduce excess deaths in this fall's resurgence.

Notes

Ethics Approval

Not applicable.

Conflicts of Interest

The author has no conflicts of interest to declare.

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