발표요약문

An Injection of Hope in the War against the Pandemic

이철우

국제백신연구소 (International Vaccine Institute, IVI) 책임연구원

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The global pandemic of the SARS-CoV-2 virus has been going on for over one and a half years. It is hard to predict the end of the pandemic with the continued community and cross-border infections. According to the World Health Organization, global COVID-19 infections are estimated to reach 200 million, with millions of deaths as of September 2021. Furthermore, the lives of countless people have collapsed due to the pandemic, which has incurred enormous socio-economic losses. Countries praised for relatively good quarantine measures and responses against COVID-19, including South Korea, are also struggling with the emergence of variants. Social distancing measures have been made stricter to cope with the progress, but this has inflicted severe damage on the economy while the citizens have increasingly become exhausted with all the social distancing and quarantine measures.

Vaccination is a critical pillar in the strategy to contain a novel infectious disease. That is why a multifaceted effort has been made to develop a safe and effective vaccine since the onset of the COVID-19 pandemic. Typically, it takes over five years to develop a vaccine, but this time, it took less than a year amid the global pandemic. Vaccination is already underway across the world, but the war against COVID-19 isn't over. The virus has mutated itself, becoming even more infectious, while mass production and equitable distribution of vaccines seem to be a distant dream. Depending on the variant, a vaccine booster shot may be required, and we may have to be vaccinated regularly going forward.

COVID-19 was a wake-up call for us to see how important it is to brace ourselves for a novel infectious disease and secure vaccines. An unknown infectious disease is perceived not as a mere disease but a security threat both at the national and international levels. The lesson learned from the COVID-19 response over the past 18 months is that a new infectious disease is no longer a problem for individual countries but a risk facing the entire humanity. No one is safe even if their country does not have infections as long as the threat of a novel infectious disease is present outside the country.

Fortunately, vaccines have been developed during the pandemic using new vaccine platform technology such as mRNA or virus carrier. This was made possible thanks to the investments in a wide range of R&D fields to develop vaccines against new infectious diseases in the future. This suggests that sustained and active investment is required in science, technology, biotechnology, and vaccine development.

In addition, the development and distribution of the COVID-19 vaccine have revealed the power of solidarity and cooperation in the international community. Individual countries or businesses would not have been able to develop vaccines in such a short span of time, but international cooperation has made it possible. Furthermore, international efforts have been carried out to ensure equal access to vaccines for countries around the world through COVAX. If the international community works together building on these lessons, we will be fully braced for yet another unknown infectious disease.