Korea's Public Health Care in Its Response to Covid-19

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Introduction

As the number of confirmed cases rose steeply after February 19, the government raised its national crisis warning level for covid-19 to "serious," the highest caution level on this scale. In some areas there have been clusters of cases going beyond the capacity of the country's health care resources, including hospital beds and human resources.

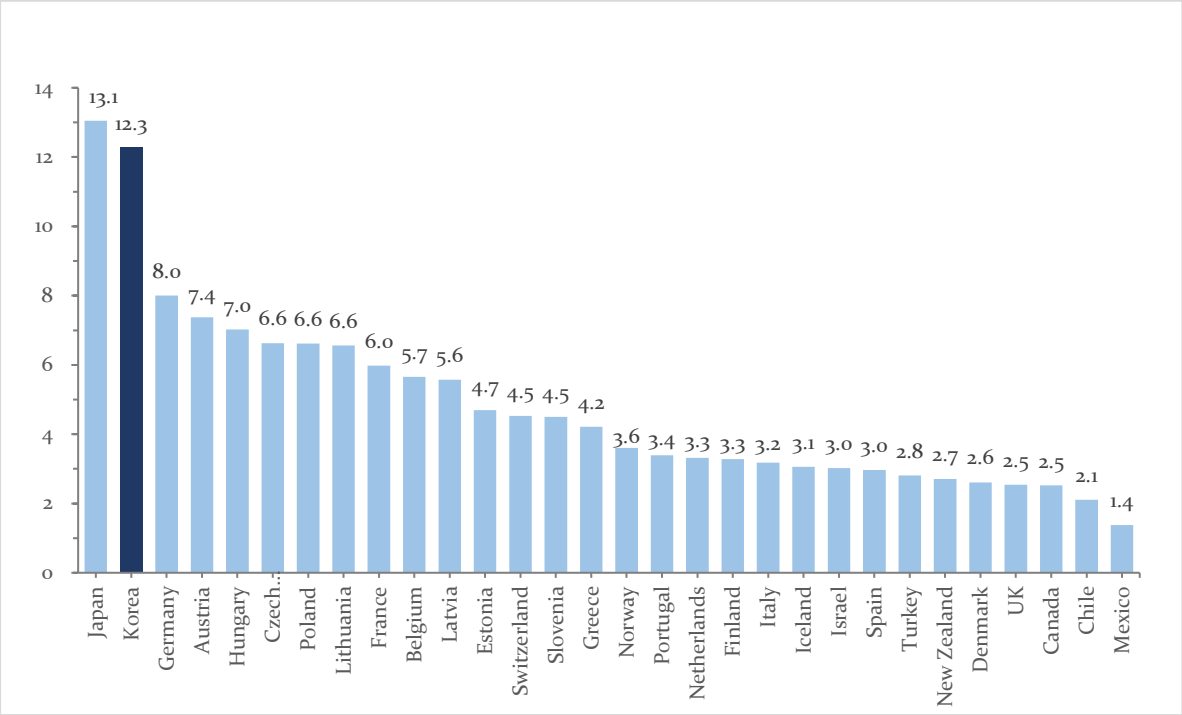
The importance of public health care has been emphasized when it comes to infectious diseases whose outbreak is hard to predict, where market-based responses are deemed to be limited in effectiveness. Public health care institutions are those established and operated by government, municipalities and public organizations. Public health care, on other hand, is provided not only by government and localities, but also by health care institutions in general.

The primary responsibility for preventing and controlling infectious diseases lies with public health care institutions. However, in times of the covid-19 crisis, it is essential to shift the perspective to a framework of public health care that combines and links the capacities of the public and private health sectors. The question we need to examine at this point is twofold: whether public health care institutions as the primary mechanism of responding to covid-19 have enough resources to deal with covid-19, and how should public health care operate in a crisis situation that goes beyond the capacity of public health care institutions.

Health care resources and covid-19

The number of hospital beds per 1,000 population in Korea was 12.3 in 2017, the highest in the world next only to Japan's 13.1. With the OECD average of 4.7, Korea represented a country with an oversupply of hospital beds, not least those intended for acute care.

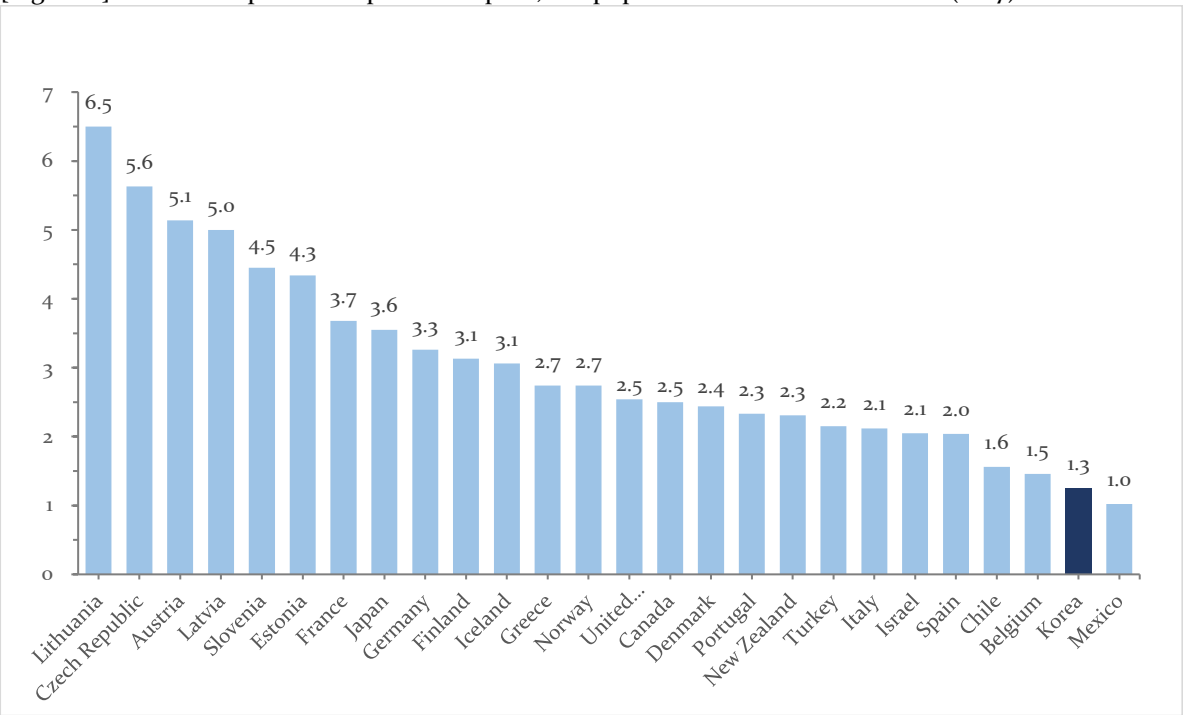
[Figure 1] Number of hospital beds per 1,000 population in OECD countries (2017)



Source: OECD statistics (2020. 3. 5.). Health Care Resources. https://stats.oecd.org/index.aspx?DataSetCode=HEALTH_REAC

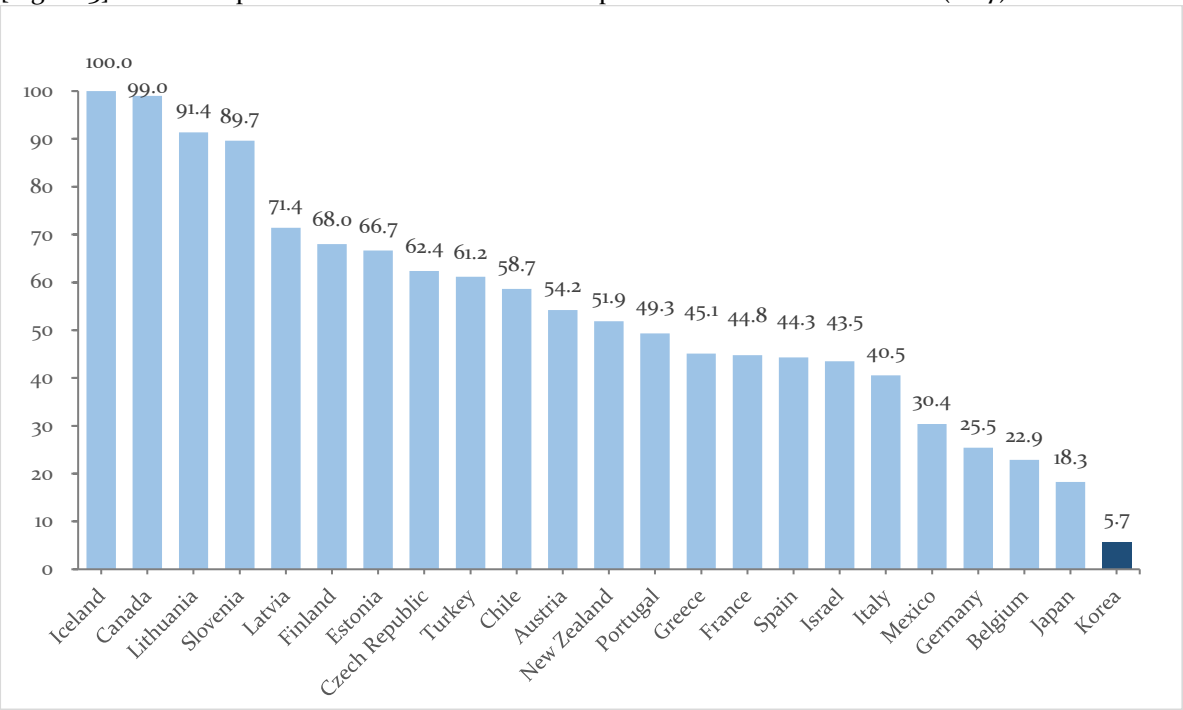
However, the number of beds in public health care institutions in Korea stood at a mere 1.3 per 1,000 population, compared to the OECD average of 3.0. Beds in public health care institutions accounted on average for 5.7 percent of all hospital beds in Korea, while the OECD average was 70.8 percent (Figures 2 and 3)

[Figure 2] Number of public hospital beds per 1,000 population in OECD countries (2017)



Source: OECD statistics (2020. 3. 5.). Health Care Resources. https://stats.oecd.org/index.aspx?DataSetCode=HEALTH_REAC

[Figure 3] Public hospital beds as a share of total hospital beds in OECD countries (2017)



Source: OECD statistics (2020. 3. 5.). Health Care Resources. https://stats.oecd.org/index.aspx?DataSetCode=HEALTH_REAC

Before the covid-19 pandemic, Korea was considered to have an oversupply of hospital beds, and people were accustomed to easy access to health care. What people see now in the covid-19 crisis is something that is a stark contrast to what they were used to: a long waiting line for hospital admission due to a shortage of beds and news stories about some of those infected who died in self-isolation because there were not enough hospital beds. The primary reason underlying this contradictory situation is the obvious shortage in health care resources in public health care establishments. Another important reason is that no system has been in place to effectively and in time distribute resources through the public health care system to where they are needed.

Following the MERS crisis in 2015, the Korean government set up a national quarantine reform plan, with the aim, among other things, of increasing the number of hospitals specialized in infectious diseases and of beds in negative pressure isolation rooms. From then on, it has been required by law for general hospitals with more than 300 beds to have in place at least one negative pressure isolation room, and an additional one for every 100 beds in excess of 300. As of December 2019 there were a total of 1,027 beds in negative pressure isolation rooms in Korea, among which 198 were in 29 nationally designated health care institutions.

Negative pressure rooms are not of much use in normal times, while keeping them is costly. If investment to public health care is to take place even after covid-19 subsides, a rationale should be presented that justifies that being prepared in advance saves a lot of social costs.

Responses to infectious diseases are an area of potential market failure, an area where it is hard to apply market-based and price mechanisms and where, therefore, the role of public health care institutions is well-justified. The relevant decision-making perspective here is that of prevention, not cost or efficiency. Along with this, there is a need to establish scientific evidence with which to convince the financial authorities and the public of the how prevention and preparedness can save social resources by responding effectively to infectious diseases. To be sure, in the process of preparing for infectious disease outbreaks, losses are inevitable in the short-term. However, as manifested throughout the covid-19 pandemic and in the response process that followed, as the proverb has it, "an ounce of prevention is worth a pound of cure." Insurers often see a pandemic risk as a tail risk—a risk in the tails, which is unlikely to occur, but which, if occurred, would be of immense cost.

Concluding remarks

Throughout the response to the covid-19 outbreak, we have seen some of those tested positive being sent home for self-quarantine due to lack of hospital beds. The covid-19 crisis has turned upside down the accustomed way in which health care services are provided and used. The covid-19 pandemic situation has been such that, as the number of people inflicted have exceeded available health care capacity, individuals' usual freedom to choose where to go for health care has inevitably given way to the initiative of the Central Disaster and Safety Countermeasures Headquarters, which involves decision-making as to inter-hospital transfers.

In preparation for the event that a large number of new cases emerge all at once, regional lead health care institutions should be designated for initial response. Public health care institutions should be the first to be made available for treating new cases. If new cases occur in a scale that exceeds the capacity of public health care institutions, additional resources should be sought in a systematic way from the private sector. Municipalities need to establish, and stay in, partnership with local private health care institutions. There is a need to have in place a mechanism with which to compensate ex post for losses occurring to private-sector providers in their participation to "public health efforts.

Another "unfamiliar" situation was that of those tested covid-19 positive who, triaged as mild, were sent to "residential community treatment centers" for room and board and treatment. It was an exceptional situation in which patients with low-acuity symptoms, who could as well have been sent home for self-quarantine, were placed at residential treatment centers. However,

there are needs for developing improved triage methods, setting up guidelines for placing patients in residential treatment facilities, and allocating human and equipment resources to those facilities for the provision of services to patients placed in them.

The use of ITC has proved effective in the response to covid-19. An improved epidemiological surveillance system may help in tracking down contacts and paths of infection. It also can help reduce the workload of the epidemiological surveillance workers involved, while still effective in containing further spread of covid-19 without serious infringement of personal information.

Clusters of cases have tended to arise from confined high-density spaces like treatment facilities and residential treatment centers. The case fatality rate has been higher among older adults, especially those with pre-existing conditions. As the number of chronic disease cases rises, the need increases to strengthen community care that makes use of a wide spectrum of community resources in a coordinated way. In the event of the outbreak of an infectious disease, it is important to readily have access to information on older adults with pre-existing conditions and other people at high risk of infection, and be ready forthwith to set up a system by which to facilitate the delivery of services to these groups. For example, it would be highly desirable to have in place practice guidelines and procedures for the delivery of home-visit nursing care to lone elderly people in a crisis situation where face-to-face contact is advised to be kept at a minimum.