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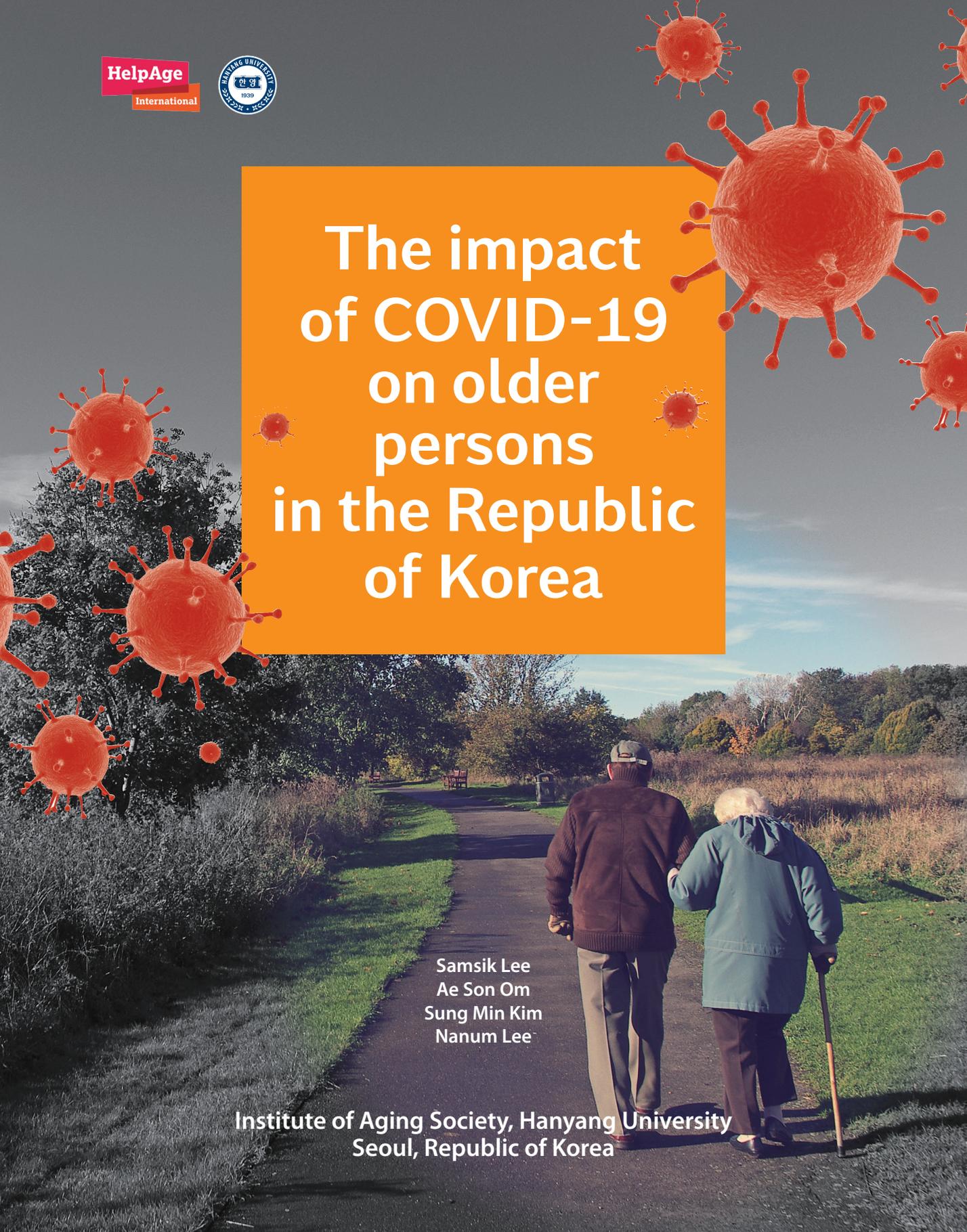
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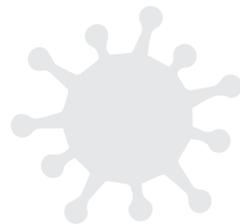


# The impact of COVID-19 on older persons in the Republic of Korea

Samsik Lee  
Ae Son Om  
Sung Min Kim  
Nanum Lee

Institute of Aging Society, Hanyang University  
Seoul, Republic of Korea



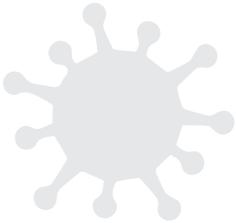


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## 1. COVID-19 situation and trends

### 1.1. Outbreak of COVID-19

In the Republic of Korea, the first case of COVID-19 (corona-virus disease 2019) was diagnosed on 20 January 2020. Immediately after that, the government raised its alert level from “new normal” to “moderate risk” and began to heighten its regional surveillance and response. As the daily number of infections increased, the government strengthened its response system and raised its alert level from “high risk” to “very high risk” on 23 February in preparation for the possibility of a national spread. The response strategy involved blocking the influx of the virus, detecting infected people, quarantining those infected, tracing their contacts and quarantining them too, etc., to minimize the spread of COVID-19. The government recommended that people refrain from gathering for events in small, enclosed places, that those with a fever or respiratory symptoms quarantine themselves, and that employers allow sick leave without a medical diagnosis. In doing so, the government regulated and strengthened “social distancing”.

### 1.2. Ruling on social distancing

The Central Disaster and Safety Countermeasures Headquarters (CDSC HQ) has adjusted the levels of

social distancing, taking into consideration the spread of COVID-19 infection. They include “social distancing” from 29 February to 21 March, “strengthened social distancing” from 22 March to 19 April, “relaxed social distancing” from 20 April to 5 May, and “distancing in daily life” from 6 May on, etc. However, there were limitations, such as various measures of the nature of “social distancing” even after the transition to “distancing in daily life”, because there were no clear criteria for adjustment and action requirements at each level. It was also pointed out as a problem that there the separate levels sounded too similar, with some form of the name “social distancing”. The criteria and actions for each level were clearly redefined to enhance the predictability and reliability of the distance adjustment.

The Central Accident Control Headquarters of the Ministry of Health and Welfare unified the basic term for all distancing stages as “social distancing” from 18 June, and divided them into levels 1 to 3, depending on the level of infection and the intensity of the preventive measures over the past two weeks. Various reference indicators such as the number of positive patients in a day, the rate of unknown cases of infection, the status of group outbreaks under management, and the ratio of management within the quarantine network were used to make

**Table 1. Reference indicators for the transition between levels of quarantine rules**

Reference indicators (based on changes over last two weeks)	Level 1 (social distancing in daily life)	Level 2	Level 3
Number of daily cases (specially by region)	Less than 50	From 50 to 99	More than 100-200 (daily cases more than doubled twice within a week)
Ratio of cases with route of infection unknown	Fewer than 5 per cent	-	Rapidly increased
Status of mass infection under management	Decreased or inhibited	Continuing to increase	Rapidly increased

Source: CDSC HQ, *press release* on 18 June 2020.

comprehensive judgments on the transition between levels. As judged by reference indicators, if patients are entering the medical system at a manageable level is a criterion for the transition from level 1 to level 2, and if the infection is spreading rapidly on a large scale is a criterion for the transition from level 2 to level 3.

Level 1 of social distancing is called the "distancing in daily life" system, which is applied to situations in which small-scale sporadic trends continue the spread but only to a level that is manageable for the typical medical system. The goal of level 1 is to ensure that people thoroughly comply with the quarantine rules in their daily lives while doing daily social and economic activities, and to keep the incidence of COVID-19 always at a level that the medical system can handle. However, exceptional restrictions can be placed on the operation of high-risk facilities in consideration of the quarantine situation.

The major quarantine measures to be implemented in level 1 of social distancing are as follows; first of

all, groups, meetings, and events can be held while complying with quarantine rules such as distancing and wearing face masks, and spectators can enter sports events on the premise that they thoroughly comply with quarantine rules. In principle, the operation of multi-use facilities is permitted. However, administrative orders requiring high-risk facilities to comply with key quarantine rules, such as wearing face masks and preparing electronic entry and exit lists, are issued, and some public facilities can be restricted or suspended depending on the risk level of each facility. In addition, schools and kindergartens must comply with quarantine rules and provide classes both remotely and on the premises. Finally, in the case of institutions and enterprises, public institutions can minimize the density of employees by allowing an appropriate percentage (e.g. one-third of the total number) to work at home or by conducting a lunchtime cross-system (i.e. half of the staff in the office have an early lunch break and the other half have a late lunch break). Private companies are also recommended to function in the same way as public agencies.

Level 2 of social distancing is applicable when the continued community transmission of COVID-19 goes beyond the level that is manageable by the normal medical system. The goal of level 2 is to reduce patient trends again to levels that the medical system, which is mobilized for patient diagnosis and treatment, can handle with the usual response, i.e. to the level of patient incidence in level 1. To this end, the government advises refraining from going out, gathering, and using multi-use facilities that are not essential to the public, and minimizing contact between people. The major quarantine measures implemented in level 2 of social distancing are as follows. Firstly, an administrative order is issued to prohibit all private and public gatherings and events where more than 50 people gather indoors and 100 outdoors face to face. Essential events, such as national holidays, must be held in accordance with the above attendance limits. Among events held by the public and private sector, such as local festivals, exhibitions, and briefing sessions, it is recommended that unnecessary events be postponed or cancelled, but if necessary they can be held in accordance with the attendance limits. Restrictions on the operation of multi-use facilities are also tightened to help the public refrain from going out or gathering. Public facilities are, in principle, suspended from operation. However, facilities may be operated if non-face-to-face services are available. In the case of private facilities, differential measures (administrative orders) are taken to mandate suspension of operation or quarantine

rules depending on the risk of collective infection. High-risk facilities such as entertainment bars are suspended, and all other multi-use facilities are required to comply with quarantine rules such as wearing face masks and limiting the number of users (one per 4m<sup>2</sup>). Welfare facilities for senior citizens, etc. are not classified as high-risk, medium-risk or low-risk facilities. Schools have both in-person and remote classes, but if they have classes on the premises they minimize the density of students by reducing the number of students. Finally, in the case of institutions and businesses, public institutions can further reduce the density by allowing an appropriate percentage of employees (e.g. one half of the total number) to work in a flexible way, work from home, or work by implementing a jet-lag (i.e. staggered) commuting system or lunchtime cross-system. Private companies are also recommended to work in the same way as public agencies.

Level 3 of social distancing applies to situations where a great number of COVID-19 infections occur through community transmission and infections are spreading rapidly and at a nationwide scale. The goal of level 3 is to prevent the rapid spread of the epidemic and restore control of the quarantine network. To this end, all activities other than essential social and economic activities such as going out, gathering and the operation of multi-use facilities are prohibited in principle, and the public is advised to stay at home as much as possible. The major quarantine measures

implemented in level 3 of social distancing are as follows. Firstly, an administrative order banning all gatherings and events, where more than 10 people meet face to face is issued, and all sports events are also suspended. All non-essential multi-use facilities are restricted or closed. All public facilities are shut down, and high-risk and medium-risk private facilities are also shut down. However, exceptions are allowed for restaurants, funeral facilities, essential industrial facilities, and high-risk and medium-risk residential facilities. All multi-use facilities that do not cease operations are suspended after 9 p.m., in addition to the mandatory quarantine rules and restrictions on the number of users in level 2. Schools and kindergartens suspend classes and switch to remote classes or close entirely. Finally, it is recommended that public institutions implement telecommuting outside the required workforce and that private enterprises implement telecommuting at a similar level where possible.

In principle, the scope of application is nationwide, but, if the variation in the degree of prevalence by region is severe, the scope of application is differentiated by region. Differential application is decided after consultation with CDSC HQ and the local governments concerned. In principle, the application period for each stage is two to four weeks, but it can also be adjusted in consideration of the degree of the spread, and the details of implementation of each level, such as the scope of restrictions on the operation of multi-

use facilities, can be adjusted flexibly. The decision on whether or not to adjust the steps is made by CDSC HQ after consultation with relevant ministries and local governments and with the Life Prevention Committee.

On 28 June, CDSC HQ prepared and announced standards for adjusting levels of social distancing nationwide, but owing to the lack of clear standards for adjusting regional levels, it was difficult to respond quickly to the spread of infections. Therefore, risk assessment and level adjustments were carried out by region from 7 July, taking into consideration the living radius of the people and the joint medical response system established by region.

Regions such as metropolitan cities and provinces are classified into seven areas; the Capital area (Seoul Metropolitan City, Incheon Metropolitan City, Gyeonggi Province), Chungcheong area (Daejeon Metropolitan City, Sejong Special Autonomous City, Chungbuk Province, Chungnam Province), Honam area (Gwangju Metropolitan City, Jeonbuk Province, Jeonman Province), North Gyeongsang area (Daegu Metropolitan City, Gyeongbuk Province), South Gyeongsang area (Busan Metropolitan City, Ulsan Metropolitan City, Gyeongnam Province), Gangwon area (Gangwon Province) and Jeju area (Jeju Province). The criteria to refer to in reviewing the elevation to level 2 of social distancing in a region are as follows: if the average number of confirmed cases (domestic occurrence) per

week exceeds the limit set for the region, the region may also consider the index of reproducing infection (R value) for one week and upgrade the level of social distancing to level 2. The limit for the average number of positive cases per week per region (domestic occurrence) was set at 40 in the Capital area, 25 in South Gyeongsang area, 20 in Chungcheong, Honam and North Gyeongsang areas, 10 in Gangwon and Jeju areas. However, when upgrading to level 3 of social distancing in the region, the Central Accident Control Headquarters under the Ministry of Health and Welfare and the Central Quarantine Task Force under the Korea Disease Control and Prevention Agency will discuss the necessity and specific criteria in advance. This is because the high social costs involved in quarantine measures at level 3 need to be considered in depth, and those measures should be taken to strengthen nationwide quarantine measures in line with regional measures.

### 1.3. Three waves of COVID-19

After the first outbreak of COVID-19 on 20 January 2020, daily infections continued to increase, reaching about 900 cases in February. The infections mainly originated from the churches of Shincheonji in Daegu Metropolitan City and spread to the welfare facilities for the elderly in Gyeongbuk Province. As of 3 March, the infections in a single city of Gyeongbuk Province, Gyeongsan City, accounted for 40 per cent of the province's total infections. To prevent a regional spread,

CDSC HQ designated Gyeongsan City as a Special Management Area. CDSC HQ implemented a system for early detection of the infected persons in the region and allocated treatment centres, along with designating dedicated hospitals, for quick distribution of prevention supplies, masks, etc.

Mass infections continued to occur in religious facilities, workplaces, etc. In response, CDSC HQ implemented “strengthened social distancing” from 22 March to 5 April. Citizens were recommended to stay at home unless for necessary activities such as purchasing urgent necessities, visiting hospitals and commuting. At workplaces, individuals were requested to observe personal hygiene thoroughly, maintain “social distancing” during lunch, and refrain from gathering in multi-use spaces, including lobbies. Employers were advised to minimize contact between employees by widening the distance between employee seats, implementing work at home and flexible working hours, etc. Employees with symptoms of COVID-19 were not allowed to come to work and anyone showing symptoms during daily temperature monitoring at work were to be sent home. The operation of religious facilities, indoor gyms, entertainment facilities, etc., with high risk of infection, was to be suspended. Violations found during on-site inspections resulted in a letter of notification followed by an administrative order prohibiting assembly and gathering. If the order was not followed, a maximum fine of \$2,715 was issued and compensation for damages (right to indemnity) including

hospitalization, treatment and quarantine expenses could potentially be claimed if infection occurred.

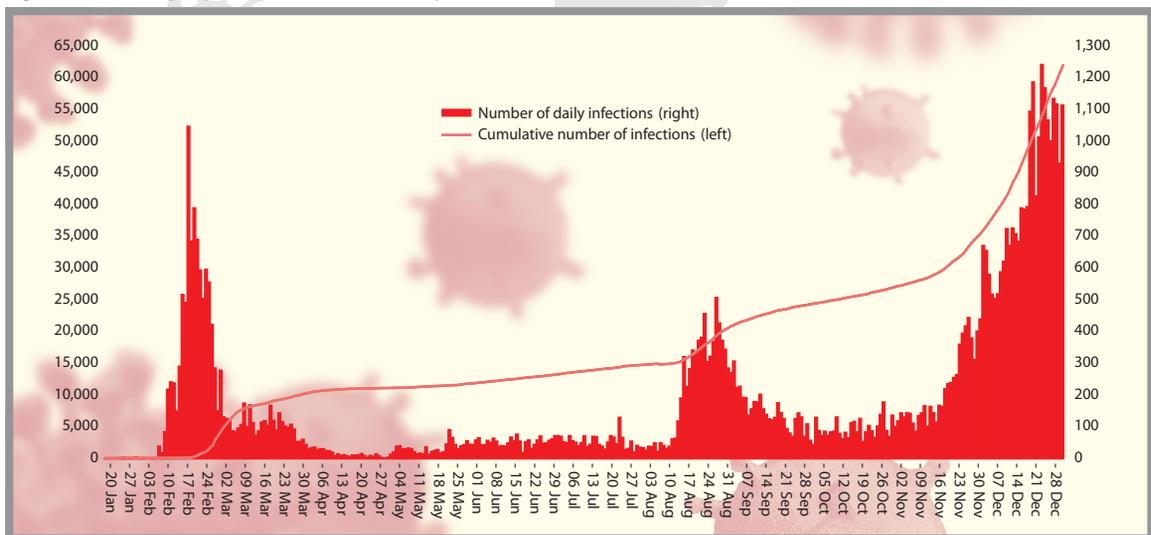
As a result of “strengthened social distancing” implementation, the rate of unknown infection routes decreased to 6.1 per cent on 31 March from 19.8 per cent on 6 March. As mass infection continued to occur, CDSC HQ extended “strengthened social distancing” for an additional two weeks, up to 19 April. The quarantine system was implemented to prevent the spread through early detection in nursing hospitals, mental hospitals, churches, etc.

As “strengthened social distancing” continued, social exhaustion accumulated, causing a decline in

people's motivation to participate in the infection prevention programme and increasing the working class's difficulties due to the depression of economic activities. Accordingly, as the daily number of COVID-19 infections decreased, CDSC HQ implemented “relaxed social distancing” from 20 April to 5 May. Among the suspended public facilities, those with a lower risk of infection – outdoor facilities and indoor ones that allowed for social distancing – were reopened under the conditions of preparation for prevention regulations. Even indoor and small, enclosed facilities were reopened if social distancing could be observed.

From mid-April, the number of daily infections, the incidence of mass infection and the rate of unknown

Figure 1. Infected people of COVID-19 in the Republic of Korea



Source: Calculated based on the release data from CDSC HQ, 20 January to 31 December 2020.

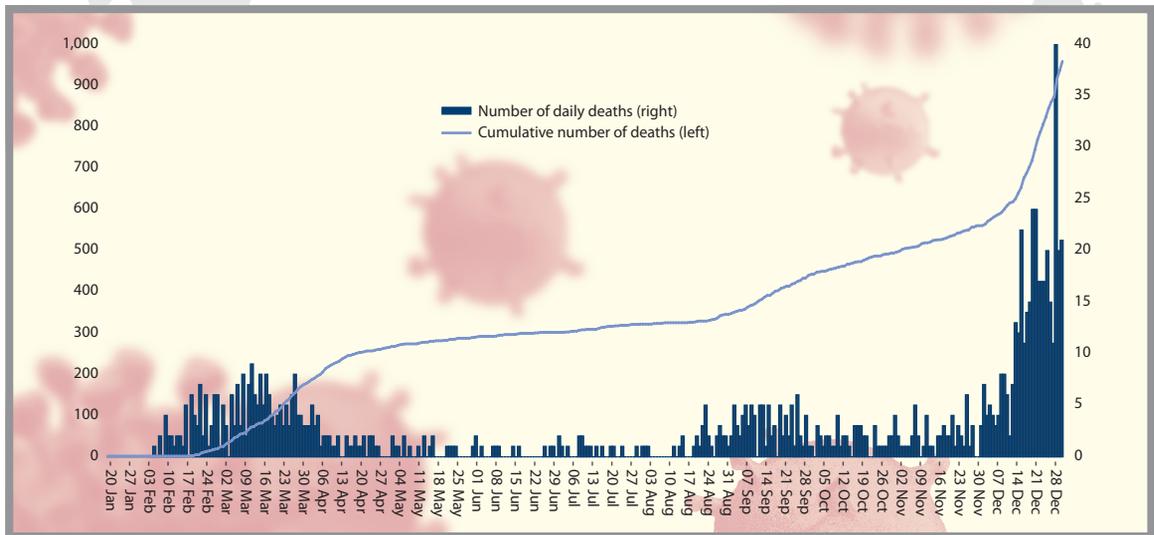
routes of COVID-19 infection decreased. Accordingly, CDSC HQ ended “social distancing” and transitioned to “distancing in daily life”, starting from 6 May.

The second wave of COVID-19 occurred during the period between mid-August and early September 2020. The number of daily infections increased rapidly, mainly in the Capital area from 9 August to 15 August. The rate of unknown infection routes reached 14.3 per cent during the same period. From 19 August, the government elevated the level of social distancing from level 1 (“distancing in daily life”) to level 2. It aimed to restrain people in Seoul Metropolitan City and Gyeonggi Province from going out, gathering and using public facilities for non-essential reasons, and to minimize contact.

After level 2 of social distancing was implemented in the Capital area, the number of daily infections began gradually increasing in the non-Capital area. Between 8 and 22 August, the average daily number of infections reached 162 for the whole country, exceeding the criteria for elevating social distancing to level 2, namely from 50 to 100 infections.

The rate of unknown infection routes also hit 16.4 per cent, and this new mass infection continued to worsen. CDSC HQ, after consultations with local governments, elevated the level of social distancing to level 2 for two weeks, starting from 23 August; CDSC HQ aimed to prevent national mass COVID-19 infection by keeping people from outings, gatherings, and using public

Figure 2. Deaths and fatality rates from COVID-19 in the Republic of Korea



Source: Calculated based on the release data from CDSC HQ, 20 January to 31 December 2020.

facilities for non-essential reasons. Thereafter, since mid-September the number of infections of COVID-19 has decreased.

The third wave of COVID-19 started from early November 2020. The daily number of infections increased to more than 500 in late November. The government elevated the level of social distancing to level 1.5 from 19 November for two weeks, and to level 2 from 24 November in the Capital area. This was followed by the adoption of level 2 by some local governments where the daily number of infections was increasing rapidly. The level of social distancing was elevated to level 2.5 in

the Capital area and level 2 in the non-Capital area for three weeks starting from 8 December.

In summary, the cumulative number of infected people of COVID-19 from its first infection on 20 January to 31 December, 2020, was 60,740 in the Republic of Korea. The infection rate (per 100,000 people) of COVID-19 was 117.2 for the whole period; it appeared to be 50.3 in December, the highest among months, followed by 15.5 in November, 13.4 in March, 11.3 in August and 7.2 in September. The total number of deaths from COVID-19 reached 900 by 31 December, with a fatality rate of 1.48 per 100 infected people.

**Table 2. Number of infected people and deaths of COVID-19 in the Republic of Korea**

Month	No. of infected people	Infection rate <sup>a</sup>	No. of deaths	Cumulative no. of deaths	Fatality rate <sup>b</sup>
Jan	11	0.0	-	-	0.00
Feb	2,920	5.6	17	17	0.58
Mar	6,956	13.4	148	165	1.67
Apr	887	1.7	83	248	2.30
May	729	1.4	23	271	2.36
Jun	1,347	2.6	11	282	2.19
Jul	1,486	2.9	19	301	2.10
Aug	5,846	11.3	23	324	1.61
Sep	3,707	7.2	91	415	1.74
Oct	2,746	5.3	51	466	1.75
Nov	8,017	15.5	60	526	1.52
Dec	26,088	50.3	374	900	1.48
<b>total</b>	<b>60,740</b>	<b>117.2</b>	<b>900</b>	<b>-</b>	<b>1.48</b>

Note: a. Number of infected people per 100,000 people = Number of infected people/registered resident population for each month (mid-year population for total) × 100,000

b. Cumulative number of deaths per 100 infected people by November =  $\sum_{i=1}^{11} D_i / \sum_{i=1}^{11} F_i \times 100$

( $i$  denotes month;  $D$  denotes number of COVID-19 deaths and  $F$  denotes number of infections).

Source: Calculated based on the release data from CDSC HQ, 20 January to 31 December 2020.

## 2. Economic trends

### 2.1. Gloomy economic outlook

The International Monetary Fund predicted, in the *World Economic Outlook* released in April 2020, that Korea's economic growth rate would be at -1.2 per cent by the end of 2020. On 28 May, the Bank of Korea also predicted that the economic growth rate would be at -0.2 per cent, which is 2.3 percentage points lower than the previous observation value of 2.1 per cent predicted in *Economic Policy Direction for 2020*, as released at the end of 2019, and it would decrease further to -1.8 per cent if the COVID-19 situation continued. Korea Development Research Institute also forecast that the economic growth rate could fall to -1.6 per cent, depending on the degree of COVID-19 spread. However, in *Second Half of the Year's Economic Policy Direction*, released on 1 June, the Ministry of Strategy and Finance predicted that the economic growth rate would stop at 0.1 per cent which is a decrease of 2.3 percentage points compared with the prediction of *Economic Policy Direction for 2020*. That economic growth rate would be the lowest since the foreign currency crisis in 1998. Even during the global financial crisis of 2009, the economic growth rate was 0.8 per cent.<sup>1</sup>

### 2.2. Uncertain labour market

As the domestic market froze because of COVID-19's spread, the resultant recession pushed self-employed people, day laborers, poor senior citizens, etc. to the edge. Self-employed small business owners were dependent on the COVID-19 special guarantee to compensate them for losses. The number of applicants from 20 February to 5 March was 33,000 and the total number of applications was over \$1 billion. Business owners had to reduce employee numbers and job markets for part-time and day workers were in jeopardy. Small restaurants reduced their numbers of employees by at least a third and retail trade and gift shops let their part-timers go. The demand for day workers who get by on daily hire, such as construction workers, housekeepers, or caregivers for older people or children, also decreased. The government's Senior Citizens' Job Project was tentatively suspended in early February.<sup>2</sup>

According to *Employment Trends for February 2020*, released by Statistics Korea, the number of employees had increased by 492,000 since February 2019. The employment rate for workers aged 15 years and older

1. [https://www.chosun.com/site/data/html\\_dir/2020/06/02/2020060200234.html?utm\\_](https://www.chosun.com/site/data/html_dir/2020/06/02/2020060200234.html?utm_)

2. <https://www.hankyung.com/opinion/article/202003062434i>

increased to 60 per cent, and the employment rate for workers aged 15 to 64 increased to 66.3 per cent, or by 0.6 percentage points and 0.5 percentage points, respectively, year on year. The unemployment rate decreased to 4.1 per cent, or by 0.6 percentage points year on year. However as the economic impact of COVID-19 began to show, the number of temporary layoffs increased, the rate of increase in employment for people in their 40s slowed, and the rate of increase in employment in the food and accommodation industry slowed with the decrease in tourism. The number of temporary layoffs increased by 142,000 year on year, which is the highest increase since September 2011. This was possibly due to the decrease in the number of senior citizens participating in the Senior Citizens' Job Project because they refrained from outings. The number of employees in their 40s decreased by 104,000, and those between 15 and 29 years of age also decreased by 49,000. However, the number of elderly employees increased from 600,000 to 740,000 thanks to the expansion of the Senior Citizens' Job Project in 2020, which played an important role in moderating the rate of decrease in total employment.<sup>3</sup>

In *Employment Trends for May 2020*, the number of employed appeared to decrease to 26.9 million or

by 392,000 year on year; the number of employees decreased for three consecutive months. By industry, the number of employees decreased by 7.9 per cent in the food and accommodation industry, by 5.1 per cent in the wholesale and retail industry, by 6.8 per cent in the association/organization, repair and other personal services industry, by 3.7 per cent in the education services industry, by 1.3 per cent in the manufacturing industry and by 3.0 per cent in the construction industry, year on year. On the other hand, the number of employees increased by 131,000 in the health and social welfare services industry, by 28,000 in the arts, sports, and leisure services industry, and by 54,000 in the agriculture, forestry and fishery industries year on year; those industries are strongly associated with the Senior Citizens' Job Project. From 6 May 2020, the government resumed the Senior Citizens' Job Project, which had been on hold because of COVID-19, but it could not stop the rapid decrease in the total number of employees. The number of employees in their 40s decreased by 187,000, the number of those in their 20s by 134,000 and the number of those in their 30s by 183,000. Thus, the decrease in jobs for people in their 20s to 40s was bigger than the increase in jobs for elderly people.<sup>4</sup>

Statistics Korea released the *First Half of 2020 Regional*

3. <https://news.joins.com/article/23727255>

4. [https://biz.chosun.com/site/data/html\\_dir/2020/06/10/2020061002510.html?utm\\_https://www.chosun.com/site/data/html\\_dir/2020/06/11/2020061100297.html?utm](https://biz.chosun.com/site/data/html_dir/2020/06/10/2020061002510.html?utm_https://www.chosun.com/site/data/html_dir/2020/06/11/2020061100297.html?utm)

*Employment Survey* on 25 August, which showed that the employment rate for cities in nine provinces (excluding eight metropolitan cities) was shown to decrease to 58.3 per cent in April or by 2.0 percentage points and the employment rate for rural areas had decreased to 65.7 per cent, or by 0.9 percentage points, year on year. In previous years, the employment rate for rural areas was higher than that for urban areas, since rural areas were more likely to account for a higher proportion of the agriculture, forestry and fishery industries in which women and senior citizens have a strong tendency to participate. The COVID-19 pandemic widened the gap in the employment rate between rural and urban areas; COVID-19 had a bigger impact on employment in urban areas than in rural areas because of the difference in the industrial structure. In urban areas, only 6 per cent was accounted for by the agriculture, forestry and fishery industries; 20 per cent was accounted for by the manufacturing industry; but 74 per cent was accounted for by the face-to-face service industries, including food, accommodation, and education services, which are the most affected by COVID-19. However, in rural areas, 37 per cent was accounted for by the agriculture, forestry and fishery industries, which are less likely to be affected by COVID-19. Young people account for a higher proportion of the population in urban areas than in rural areas; hence, the decrease in the employment rate of the young population, affected by COVID-19, had a greater impact on employment in urban areas. On the other hand, rural areas took advantage of the increase in

the employment rate of senior citizens, since rural areas have a high proportion of senior citizens, and senior citizens account for 52.3 per cent of employees .

*Employment Trends for September 2020*, released by Statistics Korea, showed that the second wave of COVID-19 caused economic difficulties and an employment shortage. The number of employees decreased to 27.0 million, or by 392,000 year on year. After April 2020 there was a year-on-year decrease in the number of employees by 476,000, but the number began increasing again in September. The number of employees excluding those 60 years or older rapidly decreased by 811,000, but the number of employees in their 60s or older increased by 419,000 year on year; this increase in the number of elderly employees was due to the Senior Citizens' Job Project resuming in early May, and the number stabilized afterwards. The number of self-employed workers including business owners also decreased by 143,000. By industry, the difficulty in employment was noticeable specifically in the face-to-face service industries; the number of employees in the wholesale and retail industry and the food and accommodation industry decreased by 432,000, mainly because of the elevation of the level of social distancing to level 2.5, which resulted in reducing external activities, including tours.

### 2.3. Deepening income inequality

The Organization for Co-operation and Development

(OECD) releases biannual reports on overall analysis and evaluation of economic trends and policies of member countries. According to the *OECD Economic Review of Korea 2020*, released on August 11th, 2020 the Republic of Korea's successful economic growth has not been evenly distributed. The Republic of Korea accomplished astounding economic growth in the past half century, known as the "miracles of Han River". However, the relative poverty rate of senior citizens was the highest among OECD members and thereby the overall relative poverty rate was the third highest among OECD members. Moreover, the after-tax income inequality, as evaluated by the Gini coefficient, showed that the level of the Republic of Korea's income inequality was the seventh highest among OECD members, which was mainly because of the bigger wage disparity and the

limitation of income redistribution than those of other OECD members.

The OECD's evaluation of the Republic of Korea's policies for the alleviation of inequality indicated that the rapid rise in the minimum wage had pushed low-skilled workers out of the labour market; the steep increase in the minimum wage in 2018 contributed to alleviating wage inequality but weakened the increasing rate of employment in labour-intensive markets before COVID-19 arrived. The OECD predicted that such inequalities would be aggravated by COVID-19. Unemployment due to COVID-19 was more concentrated among temporary workers than permanent workers, indicating that the social security net needs to be strengthened, not only in times of crisis but in ordinary times as well.<sup>5</sup>

5. <https://www.donga.com/news/article/all/20200811/102402840/1>

## 3. Social trends

### 3.1. ICT-based quarantine

CDSC HQ designated 99 self-isolation facilities with a total of 3,368 rooms in seven metropolitan cities, one metropolitan autonomous city and nine provinces for those under mandatory self-isolation but without accommodation, such as arrivals from overseas. The Self-Quarantine Safety Protection App was developed to check users safety and health status and confirm the locations of those self-isolating at home and has been in use since March 7th, 2020. Local governments send the self-isolated people a message with the app link attached, and the app can be downloaded. A GPS (global positioning system) function on the app is programmed to give an alarm when the person in quarantine leaves the premises. It is equipped with a system to help the quarantined person self-diagnose their own health status and send this information to the public health centres of cities or counties. However, those who use 2G phones, senior citizens who are unfamiliar with using app, and those who go out without their mobile phones are hard to track. Therefore, the voluntary cooperation of the self-isolated person is needed. According to the Infection Prevention Law which was promulgated in 1954 and revised on 11 August 2020, violation of the quarantine guideline is to be punished by up to one year's imprisonment or up to \$ 905 in fines.

From 27 April, the safety band was introduced and a motion-detecting function was added to the Self-Quarantine Safety Protection App to compensate for flaws in the management of self-isolating persons, using information and communications technology (ICT). Most people in quarantine follow the guidelines but a small number of self-isolating persons leave home or their designated quarantine place; for these cases, self-isolation violators are forced to wear the safety band. The safety band is connected to and operated by the Self-Quarantine Safety Protection App by means of Bluetooth. When the safety band is more than 20 m from the quarantine location, damaged or cut off, it automatically alerts the allocated manager. If there is no movement for a specified amount of time, an alert pops up on the app through the motion-detecting function.

### 3.2. Electronic entry

On 10 June, CDSC HQ introduced the electronic entry register (QR code) system using ICT to ensure the accuracy of the list of those entering facilities at risk of mass infection in the course of investigating COVID-19 infection routes. This was to solve the risk of false writing, personal information leaks, etc. from hand-written lists of visitors to facilities at risk of mass infection and to establish an effective quarantine

network system. To minimize inconveniences in issuing the QR code, cooperation was established with app companies such as NAVER, which use QR codes commercially.

Facility managers use a separate app to scan the visitor's QR code, and the scanned personal information is automatically sent to the Social Security Information Service, a public organization. During this process, companies issuing a QR code are to manage the visitor's name and phone number, and the Social Security Information Service is to manage the facility's information and visitor QR code logs; those companies cannot have access to visitors' information, and information on facilities and on personal information is separated and encrypted. The facility information gathered by Social Security Information Service and the personal information gathered by QR code companies will be combined and provided to CDSC HQ only when mass infection and other prevention reasons occur.

The electronic entry register collects, with a visitor's voluntary agreement, the minimum amount of personal information such as name, contact, facility title, entry time, etc. needed for prevention purposes, and the information is automatically discarded after four

weeks. It is compulsory for facilities, where gatherings are restricted, to introduce the electronic entry register system, but other facilities can introduce the system of their own volition. The electronic entry register system is temporarily implemented at "risk" or "high risk" levels of infectious disease crisis alert. If a mandatory facility does not use the QR code system, it can be fined up to \$ 2,716 or receive administrative measures such as a prohibition on gatherings.

Since the implementation of the electronic entry register, the number of users has continuously increased; by 19 July, 105,533 mandatory facilities and 27,371 non-mandatory facilities had introduced the QR code system, leading to 24.7 million uses of QR codes.<sup>6</sup> By 19 July, the average number of daily uses of QR codes was approximately 1 million and the cumulative number of uses of QR codes was 24.7 million including 19.6 million in mandatory facilities and 5.1 million in non-mandatory facilities. In identifying the infection route of infected persons, the electronic entry registers of eight facilities and 1,784 QR codes have been used.

On the other hand, technology is being developed to alleviate the digital gap of senior citizens. With just a phone call, the entry register can be done without the

6. [http://www.mohw.go.kr/react/al/sal0301vw.jsp?PAR\\_MENU\\_ID=04&MENU\\_ID=0403&page=31&CONT\\_SEQ=355479&SEARCHKEY=TITLE&SEARCHVALUE=%EC%BD%94%EB%A1%9C%EB%82%98](http://www.mohw.go.kr/react/al/sal0301vw.jsp?PAR_MENU_ID=04&MENU_ID=0403&page=31&CONT_SEQ=355479&SEARCHKEY=TITLE&SEARCHVALUE=%EC%BD%94%EB%A1%9C%EB%82%98)

hassle of QR codes or handwritten lists.<sup>7</sup>

### 3.3. Non-contact socialization

Various artificial intelligence (AI) content is being created for senior citizens who spend most of their time at home because of COVID-19. An AI speaker can be an alarm for medication, a brain exercise and even a karaoke machine for entertainment. When the device is not in use for a specific duration of time, family and guardians can be automatically notified and act to protect the safety of those elderly persons living alone. ICT is becoming a useful aid in the lives of alienated senior citizens during this time of the COVID-19 crisis.<sup>8</sup>

Drive-in theatres are being operated to reinvigorate the entertainment and independent movie markets that

have been cancelled or delayed due to COVID-19. Non-contact job arrangements are available. The Gyeonggi Provincial Government is operating an integrated submission system for online application. A real-time job-matching platform for construction sites, with wages higher than the market rate, will be established. An online integrated shopping mall exclusively for small business owners will be established as an online sales channels for traditional markets and street merchants. A drive-through sales system will be available for farm goods. The Gyeonggi Provincial Government has implemented a contactless payment system for bus fares that does not require the passenger's card to be read on a card reader. It was first implemented on a trial basis on 14 premium buses on seven routes, and thereafter all buses will introduce the contactless payment system.<sup>9</sup>

7. <https://www.yonhapnewstv.co.kr/news/MYH20201111004700641?did=1825m>

8. <https://www.yonhapnewstv.co.kr/news/MYH20201111004700641?did=1825m>

9. <https://news.joins.com/article/23813613>

## 1. Health and care

### 1.1. COVID-19 among older persons

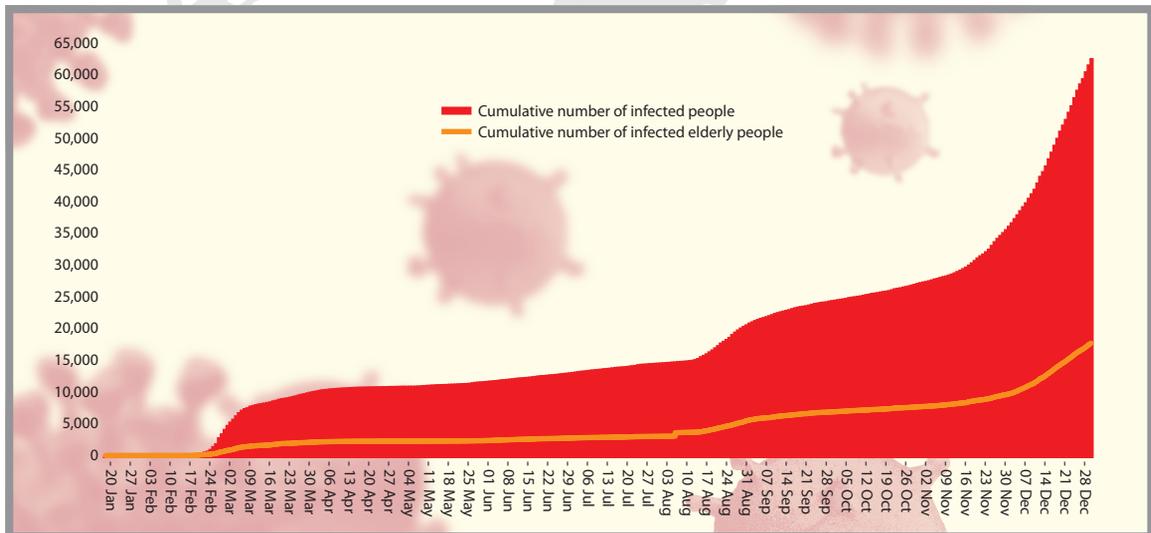
#### *Higher infection rate for the young, higher death rate for the elderly*

Among the 60,740 total infected people from 20 January to 31 December, the number of infected people in their 60s or older was 17,424, accounting for 28.7 per cent of the total; the number of infected people in their 60s, in their 70s, and in their 80s or older accounted for 15.9 per cent, 7.9 per cent and 5.0 per cent respectively. The COVID-19 infection rate (the number of infected

persons per 100,000 people) for the whole population was 117.2; it was 109.1 for people under 60 years old and 143.6 for people in their 60s or older. The COVID-19 infection rate was 147.7 for people in their 60s, 130.4 for people in their 70s and 155.0 for people in their 80s or older. By month, the COVID-19 infection rate for people in their 60s or older was 64.6 in December, which was the highest; it was followed by 15.5 in August, 15.2 in November, 14.9 in March and 11.2 in September.

From 20 January to 31 December the number of deaths of people aged 60 years or older due to COVID-19 was

Figure 3. Cumulative number of COVID-19-infected elderly people



Source: Calculated based on the release data from CDSC HQ, 20 January to 31 December 2020.

**Table 3. Number of infected people and COVID-19 infection rate by age group**

Age group	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
<b>Infected people</b>													
Total	11	2,920	6,956	887	729	1,347	1,486	5,846	3,707	2,746	8,017	26,088	60,740
<60	10	2,346	5,176	699	637	894	1,170	3,947	2,327	1,930	6,136	18,044	43,316
≥60	1	574	1,780	188	92	453	316	1,899	1,380	816	1,881	8,044	17,424
60s	1	389	855	103	62	264	184	1,155	782	429	1,059	4,349	9,632
70s	0	131	527	51	18	130	91	546	419	209	527	2,120	4,769
≥80s	0	54	398	34	12	59	41	198	179	178	295	1,575	3,023
<b>Percentage</b>													
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<60	90.9	80.3	74.4	78.8	87.4	66.4	78.7	67.5	62.8	70.3	76.5	69.2	71.3
≥60	9.1	19.7	25.6	21.2	12.6	33.6	21.3	32.5	37.2	29.7	23.5	30.8	28.7
60s	9.1	13.3	12.3	11.6	8.5	19.6	12.4	19.8	21.1	15.6	13.2	16.7	15.9
70s	0.0	4.5	7.6	5.7	2.5	9.7	6.1	9.3	11.3	7.6	6.6	8.1	7.9
≥80s	0.0	1.8	5.7	3.8	1.6	4.4	2.8	3.4	4.8	6.5	3.7	6.0	5.0
<b>Infection rate<sup>a</sup></b>													
Total	0.0	5.6	13.4	1.7	1.4	2.6	2.9	11.3	7.2	5.3	15.5	50.3	117.2
<60	0.0	5.9	13.0	1.8	1.6	2.3	2.9	10.0	5.9	4.9	15.6	45.8	109.1
≥60	0.0	4.8	14.9	1.6	0.8	3.7	2.6	15.5	11.2	6.6	15.2	64.6	143.6
60s	0.0	6.1	13.3	1.6	1.0	4.0	2.8	17.5	11.8	6.4	15.8	64.5	147.7
70s	0.0	3.6	14.5	1.4	0.5	3.6	2.5	14.8	11.4	5.7	14.3	57.3	130.4
≥80s	0.0	2.8	20.6	1.8	0.6	3.0	2.1	10.1	9.1	9.0	14.8	78.7	155.0

Note: a. COVID-19 infection rate (number of infected per 100,000 people) =

Number of infected people ÷ registered resident population for each month (mid-year population for total) × 100,000

Source: Calculated based on the release data from CDSC HQ, 20 January to 31 December 2020.

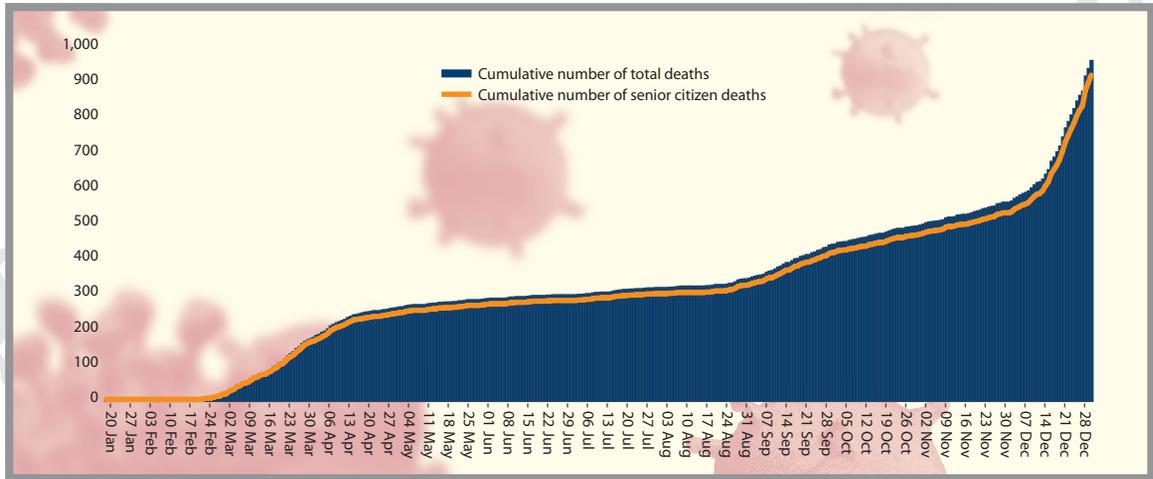
860, accounting for 95.6 per cent of total deaths by COVID-19; those in their 60s accounted for 11.8 per cent of total deaths, those in their 70s accounted for 28.7 per cent and those in their 80s or older accounted for 55.1 per cent. The fatality rate due to COVID-19, measured by the number of deaths per 100 infected people (cumulative number of infected people by the specific date), was 1.5 by 31 December; it was 0.1 for people under 60 years old

and 4.9 for people in their 60s or older. The COVID-19-specific fatality rate rose with age; it was 1.1 in their 60s, 5.4 in their 70s, and 16.4 in their 80s or older.

### ***Critical elderly patients out of hospital***

According to CDSC HQ severe and critical patients infected with COVID-19 were more common in older

Figure 4. Cumulative number of senior citizen deaths due to COVID-19



Source: Calculated based on the release data from CDSC HQ, 20 January to 31 December 2020.

Table 4. Number of deaths and fatality rate due to COVID-19 by age group

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
<b>Number of deaths</b>													
Total	-	17	148	83	23	11	19	23	91	51	60	374	900
<60	-	6	6	8	0	0	1	1	3	2	3	10	40
≥60	-	11	142	75	23	11	18	22	88	49	57	364	860
60s	-	7	16	12	4	2	0	1	2	9	11	42	106
70s	-	3	43	29	5	2	8	7	41	14	17	89	258
≥80s	-	1	83	34	14	7	10	14	45	26	29	233	496
<b>Percentage by age</b>													
Total	-	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<60	-	35.3	4.1	9.6	0.0	0.0	5.3	4.3	3.3	3.9	5.0	2.7	4.4
≥60	-	64.7	95.9	90.4	100.0	100.0	94.7	95.7	96.7	96.1	95.0	97.3	95.6
60s	-	41.2	10.8	14.5	17.4	18.2	0.0	4.3	2.2	17.6	18.3	11.2	11.8
70s	-	17.6	29.1	34.9	21.7	18.2	42.1	30.4	45.1	27.5	28.3	23.8	28.7
≥80s	-	5.9	56.1	41.0	60.9	63.6	52.6	60.9	49.5	51.0	48.3	62.3	55.1
<b>Fatality rate<sup>a</sup></b>													
Total	0.0	0.6	1.7	2.3	2.4	2.2	2.1	1.6	1.7	1.8	1.5	1.5	1.5
<60	0.0	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
≥60	0.0	1.9	6.5	9.0	9.5	8.5	8.2	5.7	5.8	5.9	5.3	4.9	4.9
60s	0.0	1.8	1.9	2.6	2.8	2.5	2.2	1.4	1.2	1.3	1.2	1.1	1.1
70s	-	2.3	7.0	10.6	11.0	9.6	9.5	6.5	7.2	7.2	6.4	5.4	5.4
≥80s	-	1.9	18.6	24.3	26.5	25.0	24.9	20.5	21.3	20.3	18.2	16.4	16.4

Note: a. Number of deaths per 100 cumulative infected people by specific month =  $\sum_{i=1}^n D_i / \sum_{i=1}^n F_i \times 100$

( $i$  denotes month;  $D$  denotes number of deaths from COVID-19; and  $F$  denotes number of infections).

Source: Calculated based on the release data from CDSC HQ, 20 January to 31 December 2020.

age groups. The recovery rate was 91.4 percent on 27 July but gradually decreased to 89.6 per cent after one week. Most of the COVID-19 patients in older age groups required hospital admission because of a pre-existing condition. For example, as of 29 November, 86.9 per cent of severe and critical patients of COVID-19 were people in their 60s or older. Most of the severe and critical patients in older age groups had a strong tendency to suffer from at least one underlying disease such as high blood pressure, diabetes, dementia and vascular disease; for example, among the total number of 329 deaths up to 3 September, 97.3 per cent suffered from underlying diseases. For this reason, the fatality rate was very high among the infected people in older age groups. Therefore, strengthened test, prevention and control have been recommended for the vulnerable and high risk groups such as the elderly.

There was a case of a critical patient with COVID-19 self-isolating for lack of medical facilities and dying at home without proper treatment. When the number of COVID-19-infected patients in hospitals reached 3,700 in 40 days after the first diagnosed infection on 20 January, only 30 patients left hospital. Ninety per cent of 198 medical facilities designated by CDSC HQ were already operating. However, most of the patients hospitalized with COVID-19 were mild cases. Hence, medical personnel claimed that discharge standards needed to be eased. However, for discharge, patients must be free of all symptoms and must test negative

twice within 24 hours.

Accordingly, the medical treatment system was restructured; 80 per cent of mild-case patients were moved to be quarantined in a separate facility, leaving the hospitals for severe patients. The patient management team in each province must first check the pulse, temperature and breathing rate of the infected people, evaluate degree of risk and classify the status of the infected people into four levels from "very severe" to "mild". Patients at "severe" and higher levels are to be allocated to hospitals with a negative pressure isolation room or infectious disease hospitals, and mild-case patients are to be treated at residential treatment centres. Infected people who are at high risk are regarded as "severe". Senior citizens aged 65 years or older, infected people with underlying diseases, pregnant women, extremely obese people, transplant and dialysis patients, and those in need of oxygen treatment are considered to be at high risk. CDSC HQ has decided to automatically hospitalize those severe patients who test positive.

If no beds are available in the area where they were tested, the National Medical Center is to allocate the patients to hospitals with empty beds in any province of the country and to notify the local government afterwards. If any province rejects or opposes, it is to be penalized. The National Medical Center has gathered information on the condition of 1,077 negative pressure isolation rooms in private and public hospitals.

Patients with a mild condition are to be medically monitored, observed and treated at residential treatment centres to prevent the spread of infection. When the condition of severe patients improves, they are to be moved to residential treatment centres to be monitored. When symptoms subside and the two tests given within 24 hours of each other in the centres are negative the patient is released. All university hospitals and general hospitals cooperated to allocate beds for severe patients.

### ***Infection routes among the elderly***

COVID-19 infection routes among the elderly have become diverse. The main infection routes are religious facilities and welfare facilities for the elderly (see Table 5 for details of these facilities). Specifically, the mass infection among elderly people in Daegu Metropolitan City and Gyeongbuk Province in the early period of the pandemic came from churches and nursing hospitals. Fifty-seven per cent of the infections until late February were church-related.

According to CDSC HQ most of the infections in nursing facilities and nursing hospitals were spread from the workers; as an example, out of 17 elderly facilities where the infection was spread in late August, infection was spread by workers in 10 facilities, by patients or visitors in 4 facilities, and by workers' family in 1 facility. Two facilities were under investigation to check for infection. Another example is Dobong district Elderly Nursing

Facility, where 16 people, mostly elderly, were infected by one care worker who was not aware of her positive status.

It was evaluated that nursing facilities are vulnerable to mass COVID-19 infection because they are densely occupied. There will typically be four people to a room with a gap of about 60 cm between beds and no ventilation system. A nursing hospital must maintain a 1.5 m distance between beds. A nursing home needs to have only 6.6 m<sup>2</sup> per person in a multi-person room, without any criterion for distance between beds; most nursing facilities had beds very closely spaced. Therefore, the amount of physical contact between workers and patients increased. Once one person was infected in a senior facility, it was temporarily closed.

Infection within hospitals has sporadically occurred. As big hospitals began closing because of high rates of COVID-19 infection within their walls, the local medical system became paralyzed. These infections were most likely spread from outpatients.

There have been other routes of COVID-19 infection, most of which eventually resulted in spreading to elderly people. For instance, from late May to early June, COVID-19 spread from clubs and pubs where young people gathered, moved to businesses, religious facilities, table tennis courts, etc. and inevitably reached senior welfare centres and nursing facilities. Door-to-

Table 5. Type of welfare facilities for the elderly in the Republic of Korea, as of 2019

Type	Title	Function	Number
Facilities of residential welfare institutions	Institution for the elderly	Providing meals and other conveniences necessary for daily life in the facility	232
	Senior citizen home	Providing senior citizens with housing meals and other conveniences necessary for daily life	115
	Welfare housing for senior citizens	Renting residential facilities to senior citizens to provide conveniences necessary for daily life, such as housing, living guidance, counselling and safety management	35
Facilities of medical welfare institutions for the elderly	Nursing facility for the elderly	Providing meals, care, and other conveniences necessary for daily life by hospitalizing elderly people who need help because of significant disabilities in mind and body due to senile diseases such as dementia and stroke	3,595
	Common residential household for the care of the elderly	Providing housing, meals, nursing and other conveniences necessary for daily life to the elderly in need of help because of significant disabilities in mind and body due to senile diseases such as dementia and stroke	1,934
Leisure facilities for the elderly	Senior welfare centre	Providing various information and services on the cultural, hobby and social participation activities of the elderly, and providing services necessary for the promotion of health, disease prevention, income security and financial welfare of the elderly	391
	Senior citizen centre	Providing a place for senior citizens from the area to voluntarily engage in social gathering, hobby activities, joint workshop operation, various information exchanges and other leisure activities	66,737
	Senior citizens class	Providing senior citizens with learning programmes related to daily life, such as sound hobbies, maintaining health for senior citizens, and guaranteeing income in order to meet their desire to participate in social activities	1,285
Home Elderly Welfare Facilities	Home-visit care	Providing various conveniences necessary for the elderly who are living their daily lives at home, while suffering from physical and mental disabilities, to lead sound and stable retirement in the community	1,513
	Day and night care	Maintaining and improving the stability of the lives and mental and physical functions of elderly people, including those with disabilities, who cannot be protected by their families for unavoidable reasons by entering the facility during the day or night to provide necessary conveniences	1,816
	Short-term respite care	Promoting the welfare of senior citizens and elderly families by briefly entering their homes and protecting elderly and disabled people who are physically weak and cannot be protected temporarily for unavoidable reasons	78
	Home-visit bathing	Providing bathing by visiting elderly people with bath equipment	942
	Community care support service	Providing counselling on elderly people's lives and personal health, educating guardians such as elderly people and family members, and providing various conveniences to lead a sound and stable retirement in the community.	412
	Home-visit nursing	Providing nursing, medical assistance, nursing counselling, oral hygiene, etc. by visiting the home of elderly patients in accordance with the instructions of doctors, oriental medical doctors or dentists	60
Aged protection agencies	Central Elder Protection Agency	Facilities established and operated by the State to establish a linkage system between regions and prevent abuse of senior citizens	34
	Local institution specializing in the protection of the elderly	Facilities installed in special cities, metropolitan cities and special autonomous provinces to expedite the discovery, protection and treatment of abused elderly people	19
Senior employment support agencies		An institution directly responsible for the development and support of senior citizens' jobs in the local community, start-up and foster, and the production and sale of goods by the elderly	184

Note: A nursing hospital is classified as a medical institution.

Sources: Article 31 of the Elderly Welfare Act; Statistics Korea, KOSIS (extracted on 17 December 2020).

door salespeople gathered senior citizens for pyramid-scheme events that would include sales pitches and sing-alongs, which caused saliva to act as a means of infection that ultimately spread to many senior citizens and salespersons. Table tennis courts were popular among middle-aged to elderly age groups, but masks were often taken off and yelling was involved, causing the spread of infection. Hence, serial infection that started from young to middle-aged groups spread all the way to the group most vulnerable to COVID-19: elderly people with underlying diseases. For this reason, senior citizens were recommended to refrain from non-essential outings and avoid enclosed, concentrated and close contact environments.

There was an increase in “dark infected people”, i.e. those whose route of infection was unknown; for example, the infection route of 9.7 per cent of the infected persons from 31 May to 13 June was unknown

from 7.7 per cent from between 17 and 30 May. The government set, as one of the standards for social distancing, a limit of 10 percent of infected people with unknown routes of infection.

## 1.2. Healthcare system and services

### *Threat to primary health system*

As the number of confirmed COVID-19 cases continued to rise the treatment of critical patients with other diseases in hospitals was disrupted (Box 1). Accordingly, the Enforcement Decree of the Act on the Prevention and Management of Infected Diseases was revised on 7 October and enforced on 13 October; if people with mild cases refuse to move from the hospitals designated for severe cases to general hospitals or clinics, residential treatment centres and other related facilities by order of the authorities, they are to be fined

#### **BOX 1.** *COVID-19 threatening treatment of other serious emergency patients*

*According to the Chosun Ilbo article dated 15 September 2020, more than 20 hospitals have not accepted elderly patients who have recently suffered from stroke symptoms. On 8 June, two elderly people in their 80s were found unconscious in an apartment in Nowon District, Seoul Metropolitan City.*

*At the time, paramedics said, “We judged that cerebrovascular disease caused a decline in consciousness. It was assumed that we would get to the hospital in about 10 minutes. But the patient was admitted to the emergency room nearly three hours later. The patient was denied at 25 hospitals; beds were not available because mild COVID-19 cases occupied most beds. Eventually, it took almost three hours to get to a place over 50 km away. The government established severe emergency medical clinics to prevent other serious emergency patients from being treated in the COVID-19 situation, but it did not do its part. As patients with mild symptoms flock to the hospital, there are no beds for serious patients.”*

*Source: <https://news.joins.com/article/23872859>*

\$ 458 for the first instance of refusal and \$ 916 for the second instance of refusal.

### ***Socially distanced welfare facilities for elderly people***

The welfare facilities for the elderly (senior facilities) are to be suspended or resume depending on the increase in mass infection. The Seoul Metropolitan Government has shut down 3,601 senior facilities indefinitely since February; they included 36 senior welfare centres, 98 social welfare centres and 3,467 senior citizen centres.

In accordance with the guidelines of CDSC HQ, the Seoul Metropolitan Government reopened social welfare facilities since as of 20 August to minimize the care vacuum. Senior citizen centres reopened from

3 August, earlier than other senior facilities, taking into consideration the prolonged shutdown causing instability in the minds and bodies of senior citizens; in accordance with social distancing, their operation was limited to four hours per day, each person was recommended to use the facility only two or three times a week, and only 50 percent of the full capacity was allowed to be used.

However, mass infection with COVID-19 has occurred in senior facilities, senior hospitals and clinics since August; COVID-19 spread into those facilities through workers and then spread to senior citizens. Hence, senior welfare centres were again closed. On 23 August, Ministry of Health and Welfare recommended that social welfare utilization facilities close in accordance

**Table 6. Guideline for the operation of social welfare facilities**

Level of social distancing	Guidelines
Level 1	<ul style="list-style-type: none"> <li>• It is mandatory to comply with quarantine rules.</li> <li>• The number of persons allowed in the facility is one per 4m<sup>2</sup>.</li> <li>• Non-contact services, part-time hours and the use of pre-booking systems are recommended.</li> <li>• Living facilities are limited to going out or staying out.</li> <li>• Visits are available within the limited number of people.</li> </ul>
Level 1.5	<ul style="list-style-type: none"> <li>• Physical activity is limited.</li> <li>• High-risk facilities are converted to part-time operation and pre-booking.</li> </ul>
Level 2	<ul style="list-style-type: none"> <li>• Facilities must operate at less than 50 per cent of the quota (up to 100 people).</li> <li>• No food is allowed indoors.</li> <li>• All facilities are operating part-time and pre-booking in principle.</li> <li>• People in living facilities are prohibited from going out or staying out in principle.</li> <li>• Visits are not face to face.</li> </ul>
Level 2.5	<ul style="list-style-type: none"> <li>• Facility must operate at less than 30 per cent of the quota (up to 50 people).</li> <li>• Services provided are centred on vulnerable groups.</li> <li>• It is to be determined whether or not to maintain operations for each individual facility by comprehensively judging the status of confirmed patients in the neighbourhood, the possibility of infection, quarantine measures and the structure of the building.</li> <li>• Measures are to be taken to maintain services for vulnerable groups who cannot use facilities due to reduction or suspension of facility operation.</li> </ul>
Level 3	<ul style="list-style-type: none"> <li>• The operation of social welfare (use) facilities is suspended in principle.</li> <li>• Emergency care services are provided to ensure that there is no gap in care for vulnerable people.</li> </ul>

Source: CDSC HQ, press release, 11 November 2020.<sup>10</sup>

with elevation of the level of social distancing to level 2. Other facilities might also be closed at the discretion of local governments. Welfare facilities for the elderly were recommended to close except for emergency care and essential services to prevent a gap in care services.

On the other hand, the emergency support system was operating during the COVID-19 crisis; for example, caregivers were recruited through social service centres and special emergency care support task force teams were organized. Even during the closure of elderly welfare facilities, employees worked normally to provide the elderly with essential services such as emergency care, delivery of boxed lunches, check-in calls, activity support, meal support, home visits and non-contact programmes to prevent welfare blind spots.

On 12 October, the Ministry of Health and Welfare recommended that local governments actively reopen social welfare facilities including elderly welfare facilities, as the level of social distancing was lowered to level 1. Since 9 November, 89.8 per cent of social welfare facilities nationwide have been providing services for residents in local areas; only 16.5 per cent of all facilities opened before 12 October. Social welfare facilities were to shut down when social distancing reached level 2. This regulation was revised to allow social welfare

facilities to maintain their functions for vulnerable social groups before level 3 of social distancing, and even when closed the emergency care system for vulnerable social groups can be maintained.

### ***Emergency care services***

Social service centres were established in 2019 to improve the quality of social services and raise public awareness; they are to be established in all metropolitan cities and provinces by 2022. The government executed common response guidelines in maintaining social welfare services in response to the spread of COVID-19 on 21 February, 2020. On 1 March, Daegu Metropolitan Government and the Daegu Social Service Centre launched the Emergency Care Service Support Group and recruited care volunteers to provide care services for vulnerable groups, such as children, senior citizens and people with disabilities, who needed care because of COVID-19. The emergency care service was to be provided for children, senior citizens and people with disabilities, who were self-isolating and needed care because of COVID-19 infection and hospitalization of the family. Those who had their previous services shut down were also eligible for the emergency care service. The other target group for provision of the emergency care service was those who lived in places at risk of care

10. [http://www.mohw.go.kr/react/al/sal0301vw.jsp?PAR\\_MENU\\_ID=04&MENU\\_ID=0403&page=8&CONT\\_SEQ=360947&SEARCHKEY=TITLE&SEARCHVALUE=%EC%BD%94%EB%A1%9C%EB%82%98](http://www.mohw.go.kr/react/al/sal0301vw.jsp?PAR_MENU_ID=04&MENU_ID=0403&page=8&CONT_SEQ=360947&SEARCHKEY=TITLE&SEARCHVALUE=%EC%BD%94%EB%A1%9C%EB%82%98)

suspension due to infection and self-isolation of workers in social welfare facilities. Emergency care services were to be provided day and night and at weekends.

On 25 August, the Ministry of Health and Welfare announced countermeasures to strengthen care services for vulnerable social groups in response to the renewed spread of COVID-19 to prevent blind spots for the vulnerable groups, such as senior citizens and people with disabilities, due to the closure of social welfare facilities. Even during the closure of social welfare facilities, emergency care services were provided for vulnerable groups including senior citizens and people with disabilities; they included meal delivery, check-ups, activity support and other necessary services.

### 1.3. Long-term care

#### ***Lack of care workers***

As the demand for long-term care services has increased, the number of caregivers arriving from China has increased because of the lack of Korean caregivers. During the spread of COVID-19, many Chinese caregivers returned to China, and hence nursing facilities and nursing hospitals had difficulty providing services for elderly patients. This situation resulted in lowering the quality of care services. In order to care for a great number of elderly patients with a small number

of workers and caregivers, most nursing hospitals placed senior citizens in multi-person rooms, which in turn increased the risk of spreading infection, since one care worker made rounds to different rooms. According to law, nursing hospitals must have 1 doctor per 40 patients, and 1 nurse per 6 patients, but there was no regulation on care workers.

#### ***Protection from infection by care workers***

As most cases of COVID-19 infection occurred at senior facilities, at the beginning of the spread of COVID-19, CDSC HQ recommended that nursing hospitals exclude care workers, including caregivers, from Hubei, China, after checking their travel history. In order to prevent the spread of infection to 5,500 nursing facilities and 73,000 care workers, CDSC HQ sent guidelines in response to COVID-19 to local authorities, the National Health Insurance Corporation and the Nursing Facilities Association on 28 January, 31 January, and 4 February, respectively. According to the guidelines, non-essential entries are limited and, if entries are not avoidable, temperature checks and disinfectant use in a separate closed area are recommended. Actively monitoring workers and the elderly with fever or respiratory symptoms is recommended by taking daily temperature checks and logs. Workers are recommended to wear masks at all times. If any worker has travelled to a foreign country, it is recommended that they are sent on leave. CDSC HQ receives daily reports on situations

in nursing facilities and nursing hospitals through local authorities and the National Health Insurance Corporation.<sup>11</sup>

In cooperation with National Health Insurance Corporation, CDSC HQ inspected all nursing facilities and nursing hospitals nationwide when COVID-19 infections were on the rise. CDSC HQ was to inspect all nursing facilities and nursing hospitals periodically every two weeks in the Capital area and every four weeks in the non-Capital area from mid-October to the end of 2020. Items checked were workers' history of visiting special entry procedure target areas, exclusion of these workers from the workplace, the workers' names if they were not excluded from the workplace, pneumonia patients among admitted patients and their treatment, limitation of visitors, etc. Based on the results of the inspection, insufficient details were ordered to be rectified.

For two weeks from 22 October, the National Health Insurance Corporation along with local governments inspected the overall prevention activities of 1,438 nursing hospitals, 5,996 nursing facilities, and 418 mental hospitals. The overall results showed compliance with the prevention guidelines, but inadequate details still existed. In nursing hospitals, inadequacy of transfers to quarantine rooms for suspected patients

(9.9%), no plan for transferring the infected (8.1%), etc. were observed. In nursing facilities, failure to secure substitute workers (42.2%), confined spaces, lack of extra room, and the unavailability of quarantine areas for suspected patients (16.2%), etc. were observed.

Education on the prevention of COVID-19 infection was intensified; a worker's code of conduct and videos for standard education, and an education programme for nursing hospitals were disseminated to not only nursing hospitals but also nursing facilities, mental hospitals, rehabilitation hospitals, etc. Support was given for the improvement of safe visiting rooms in nursing hospitals and the installation of portable visiting areas in nursing facilities.

Although there are no official guidelines from the quarantine authorities, nursing facilities with many elderly or immune-compromised people are taking a pre-emptive response to COVID-19. As mass COVID-19 infection in nursing facilities continue, those facilities require a mandatory submission of COVID-19 test results when hiring employees. As one example, in Cheongju City a COVID-19 diagnostic test (voice confirmation) along with a CV became mandatory for applications for jobs in nursing facilities. Small facilities such as day and night care centres also request a COVID-19

11. [http://www.mohw.go.kr/react/al/sal0301vw.jsp?PARMENU\\_ID=04&MENU\\_ID=0403&page=6&CONT\\_SEQ=36](http://www.mohw.go.kr/react/al/sal0301vw.jsp?PARMENU_ID=04&MENU_ID=0403&page=6&CONT_SEQ=36) 1138

medical certificate. Job seekers are complaining about the difficulty of paying diagnostic test fees. The free COVID-19 diagnostic test is provided only when fever or respiratory symptoms appear within 14 days after visiting high-prevalence country or region, or when COVID-19 is suspected according to the opinion of a doctor. When an individual undergoes a diagnostic test as necessary, he or she has to pay about \$ 82.<sup>12</sup>

### ***Roles of health insurance system***

The Korean national health insurance system reimbursed 50 percent of costs for testing newly admitted patients in nursing hospitals after 13 May. Quarantine rooms in nursing hospitals were also provided as a health insurance benefit for those infected with COVID-19, suspected cases and patients with unknown pneumonia, which was extended to those who needed a COVID-19 test for respiratory symptoms including fever, cough and sore throat. On 24 March, the “management fee for infection prevention in nursing hospitals” was temporarily implemented to provide approximately \$ 1 per day for nursing hospitals when they designated their infection management manager (doctor or nurse) and intensified the management of their workers and facility. Therefore, if nursing hospitals quarantined and tested patients with fever and respiratory symptoms in advance, health

insurance benefit for using quarantine rooms would be paid regardless of the result of the test.<sup>13</sup>

### **1.4. Mental health and psychosocial well-being**

According to a news article, “A 67-year-old man, who lived alone in a rented apartment in Seoul Metropolitan City, was discovered by a milk delivery man a week after his death. He was a basic livelihood security recipient and was suffering from a chronic disease. However, he was not able to be taken of care by the social worker owing to the increased workload due to the COVID-19 infection spread causing increased workloads.”<sup>14</sup> This is representative of the rapid increase in the number of elderly people dying alone. The number of people aged 65 or older living alone rapidly increased from 1.27 million in 2016 to 1.59 million in August 2020. The number of elderly people dying alone reached 1,145 in 2019, increasing by 55.8 per cent in comparison with 735 in 2016. As the number of single elderly households increased rapidly, there was concern that the number of elderly solitary deaths would also increase owing to the spread of COVID-19 infection. This was because the social isolation of elderly people living alone was expected to increase as visits from their families, relatives and social workers were likely to decrease as

12. <https://www.yna.co.kr/view/AKR20200914045500064?section=search>

13. [http://www.mohw.go.kr/react/al/sal0301vw.jsp?PAR\\_MENU\\_ID=04&MENU\\_ID=0403&page=54&CONT\\_SEQ=353749&SEARCHKEY=TITLE&SEARCHVALUE=%EC%BD%94%EB%A1%9C%EB%82%98](http://www.mohw.go.kr/react/al/sal0301vw.jsp?PAR_MENU_ID=04&MENU_ID=0403&page=54&CONT_SEQ=353749&SEARCHKEY=TITLE&SEARCHVALUE=%EC%BD%94%EB%A1%9C%EB%82%98)

## BOX 2. Corona blues

According to a JoongAng Ilbo article dated 30 April 2020, a lot of elderly people fell into depression because of COVID-19. For example, Mrs Kim, a 70-year-old woman living in Nowon District, Seoul, has not been out of her home for a long time to avoid COVID-19 infection. She recently went to a hospital for the treatment of her depression. She was so afraid to leave the house that she postponed the date for the treatment. But she should have gone earlier this month. Since then, Mrs Kim's symptoms have been quite bad. She improved a lot when she got the treatment at the right time before, but, as she stayed at home for more than two months, her condition worsened. The doctor diagnosed that "with less activity, her muscles had become weaker and she had fallen into a vicious cycle of depression again as her appetite decreased".

Mrs Lee Yoo-jik, who is 86 years old and lives in Mapo District, Seoul Metropolitan City, has stayed only in her house for more than three months. But on 24 April she left her house for the first time to go to the bank, and she went to the ophthalmology department of Seoul National University Hospital on 27 April. She could not postpone it because the medicine that she needed to take had run out. Mrs Lee, a former elementary school teacher, used to attend meet-ups for retired teachers on 10 days a month before COVID-19. She also never missed trips to the florist, and she walked 4 km around the Han River every day. Her children began buying her groceries for her when they saw she would not leave home. Although she would go to the front of her children's house, she could not enter because she was afraid she would carry the virus to her children. She said, "Those people in their 80s have the most deaths from the virus. It scared me, and at the same time my children worried about me going out of my house. It is so frustrating." Mrs Lee had surgery for cancer three years ago and she delayed her regular check-up to May, three months later. Her son said, "I am worried because my mother has indigestion and diarrhoea since she cannot exercise properly and cannot meet people around."

An 80-year-old woman who lives in Seoul Metropolitan City felt like she was going crazy because she only stayed at home. Her feelings had turned into anxiety, and she could no longer contain her anger. She said, "Why should I live like this?" Her personality changed a lot, and she was diagnosed with a cognitive disability. She even suffered symptoms of delirium, such as talking nonsense or sleep talking, so she was prescribed antidepressants by her hospital.

Source: <https://news.joins.com/article/23766556>

a result of social distancing. The Act on the Prevention and Management of Solitary Deaths was enacted in March 2020 and will come into effect in April 2021.<sup>14</sup>

With the closure of welfare facilities for the elderly and for people with disabilities, due to COVID-19, the cases of elderly and disabled people complaining of anxiety

and depression have increased, after they repeatedly watched news about COVID-19 at home. Many used to be energetic but all of their recent activities have stopped. As the COVID-19 situation has continued, the number of people complaining about "corona-virus depression" (known as "corona blues") has increased (Box 2).<sup>15</sup>

14. [https://www.chosun.com/national/welfaremedical/2020/10/12/4CKRRGW44FGPFILCSJ6WXDQTAM/?utm\\_source=naver&utm\\_medium=original&utm\\_campaign=news](https://www.chosun.com/national/welfaremedical/2020/10/12/4CKRRGW44FGPFILCSJ6WXDQTAM/?utm_source=naver&utm_medium=original&utm_campaign=news)

15. <http://news.kbs.co.kr/news/view.do?ncd=4395881&ref=DA>

After analysing data from the Legislative Investigation Office of the National Assembly, the Ministry of Health and Welfare, and Statistics Korea, Chung Chun-sook, a member of the National Assembly, mentioned on 2 October that senior citizens should be careful about high fatality rates and psychological health during the COVID-19 situation. He said, "with COVID-19, elderly groups are not only exposed to high mortality rates when they get tested positive, but also suffering from a psychological crisis due to difficulties in forming social relationships." And he also said, "please pay attention to the elderly around you and recognize isolation and abuse as social problems, not as individual problems, and take an active interest."<sup>16</sup>

The Jeollabuk-do Research Institute revealed through the issue briefing "*Let's Overcome the daily crisis of the elderly in rural Jeollabuk-do!*" that COVID-19 has caused social problems such as income reduction, unemployment, social isolation and care vacuum. Stress accumulates along with daily changes due to prolonged indoor activities, lack of face-to-face contact and not being able to touch. As elderly people account for a high percentage of COVID-19 cases and are classified as high-risk groups, they are not allowed to have meetings and events, and multi-use facilities get locked down for prevention purposes. The elderly are the most affected

by non-face-to-face and non-contact environment. Specifically, elderly people who live in rural areas experience a lot of stress and loneliness through the reduced frequency of contact with local residents and their children living in other cities. In particular, the rural community in Jeonbuk Province has become a super-aged society and hence it needs to pay attention and respond to the impact of COVID-19 on the psychological well-being and mental health of rural elderly people in the region. Since the quality of life and health of elderly people depend on the environment surrounding them, especially the community, caring communities covering small areas to ease the psychological and social contraction of elderly people should be created for the rural areas with vulnerable living conditions. Dr. Cho, working in the Jeollabuk-do Research Institute, suggests that, "Based on the rural village community in Jeonbuk Province, policy support should be provided so that the members can become the main body of care and enable mutual psychological, emotional and life care."<sup>17</sup>

The Ministry of Health and Welfare organized the COVID-19 Integrated Psychological Support Group from 29 January, the early days of the COVID-19 outbreak, to provide psychological support to those who had tested positive for COVID-19 and had been quarantined. The support group, composed of the National Trauma Centre

16. <https://news.joins.com/article/23884945>

17. <https://www.hankookilbo.com/News/Read/A2020091415270001565>

as a coordinator, a national mental hospital and mental health welfare centres across the country, implemented psychological counselling and management for those subject to isolation. In addition, psychological support services were provided by various ministries and private organizations such as Disaster Psychological Recovery Support Group of the Ministry of Public Administration and Security, the Wee Centre of the Ministry of Education, the Institute of Mental Health Medicine's Life Therapy Centre, the 1339 helpline, links with the Korean Psychological Association and free phone counselling.

On 18 May, the government established and began operating a psychological support team within CDSC HQ (Central Accident Control Headquarters) to strengthen public-private cooperation and consolidate capabilities among related ministries. Specifically, the National Trauma Centre and the National Psychiatric Institute are guiding the positive patients and their families on psychological counselling and providing counselling to those who agree to the counselling system. In addition, local governments are operating a psychological counselling hotline (1577-0199) for self-isolating people and the general public through mental health welfare centres. As of 3 June, these services have provided counselling to 16,871 infected people, 161,366 self-isolating people and 189,924 other people.

As the pandemic continues, the phenomenon of corona blues is spreading. It is characterized by increased anxiety and depression due to social isolation and refraining from going out, which is an even greater concern than the increase in the number of suicides. Through the KakaoTalk chatbot<sup>18</sup> (chatter robots) of the National Trauma Centre and application of the National Mental Health Centre's app (Magic Patting, mental health self-examination), proper mental health information and self-diagnosis are supported for the prevention of corona depression. As an early intervention in depression and anxiety, counselling and psychological support systems by target and degree have been also provided to prevent corona depression. Self-diagnosis using KakaoTalk chatbots will be implemented throughout the country. Service providers for senior citizens are receiving strengthened education and guidance in the early detection of and intervention in corona depression for elderly people in the community, while support for the vulnerable by minimizing the gap in care for people with disabilities has been strengthened.

Most local governments have made efforts to overcome corona depression. As an example, Seoul Metropolitan Government is operating the Vulnerable Elderly Safety Management Solution Project, which installs Internet of Things (IoT) devices in elderly people's homes to provide services in case of emergency situations.

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18. A free call and messenger application for smartphones, launched in March 2010, supports iOS, Android, BlackBerry, Windows Phone operating system and PC versions.

**BOX 3. Response to corona blues through AI**



Picture of people listening to Aria in an elderly household

According to Gyeongnam Provincial Government, since November 2019, with SK Telecom, it has operated an "AI integrated care service" that combines welfare and ICT to support vulnerable people who need care for 24 hours a day. The AI speaker which is called "Aria", was intended to secure a safety net for local communities by installing it on a trial basis to 1,000 households with welfare vulnerabilities, including elderly and disabled people. In the event of an emergency, the request for help will be linked to the security company through Aria and responded to by paramedics dispatched by the security company's prompt report. After the outbreak of COVID-19, the government is filling the vacuum in care blind spots due to

limited manpower, such as sending out infectious disease prevention rules from time to time and taking on the role of a chatmate for those senior citizens who live alone, in response to corona blues. As the social welfare centres are closed owing to the spread of COVID-19, it is providing emotional help to single elderly households who are spending time alone at home. About 75 percent of households where it has been installed use AI speakers. Gyeongnam Provincial Government aimed to provide integrated care services through AI speakers for a total of 7,000 households, including the supply of Aria to 1,800 additional vulnerable households by the second half of 2020.

Source: [https://www.gyeongnam.go.kr/index.gyeong?menuCd=DOM\\_000000106007014000](https://www.gyeongnam.go.kr/index.gyeong?menuCd=DOM_000000106007014000)  
[https://www.chosun.com/site/data/html\\_dir/2020/08/03/2020080302799.html?utm\\_source=bigki ds&utm\\_medium=original&utm\\_campaign=news](https://www.chosun.com/site/data/html_dir/2020/08/03/2020080302799.html?utm_source=bigki ds&utm_medium=original&utm_campaign=news)

The aim of the project is to check, in real time, the safety of those senior citizens who are eligible for the customized care service, given the interruption to it and the possibility of associated depression and age-related decline. Between its introduction in 2018 and July 2020, the project detected 135 dangerous situations and responded pre-emptively. None of the elderly people who use this service has died alone. In response to the prolonging of COVID-19, the Seoul Metropolitan

Government expanded the scope of the project to fill the care vacuum for senior citizens with non-face-to-face care and the reduction of face-to-face care due to the closure of social welfare facilities. The IoT devices have already been installed in 7,500 households of elderly people, and a further 10,000 IoT devices were planned to be installed by the end of 2020.<sup>19</sup>

Another example is the case of Jeju Province. The

19. <https://www.hankookilbo.com/News/Read/A2020091009300003093>

suspension of operation of public facilities due to COVID-19, including senior citizen centres, is feared to cause damage such as social disconnection and depression of vulnerable elderly people in welfare blind spots. Therefore, Jeju Provincial Government is actively engaged in customized care services, such as checking safety, daily life support, and supporting linked services, for those senior citizens who need care. The customized care service for senior citizens is a project to provide services, integrating five existing projects such as basic care, comprehensive care, short-term drivers, resource links and making friends for those who live alone. The Jeju Provincial Government divided the region into 10 areas according to users' accessibility; in a single area, a total of 10 agencies operate a system that takes cares of senior citizens. The customized care service is to provide various programmes to promote health and build social relationships for senior citizens living alone, elderly couples, etc., who are eligible for basic living allowances, those in the next lowest income bracket or those eligible for basic livelihood security. Specifically, a non face-to-face care network service system has been introduced to improve the quality of care services through ICT (Box 3).<sup>20</sup>

### 1.5. Dementia

From 3 March, the government eased address

restrictions to improve accessibility to the Dementia Safety Centre and provided services such as early check-ups and prevention through professional personnel visiting senior citizen centres and senior welfare centres. The government continues to expand infrastructure and services such as Dementia Relief Villages, dementia early screening, etc., and strengthen Dresearch and development investment for dementia prevention and treatment. In order to prevent gaps for long-term care recipients due to family hospitalization, etc. due to COVID-19, the government expanded day and night care facilities, provided short-term care (nine times a month), and developed 24-hour round-the-clock care for senior citizens with dementia or living alone.<sup>21</sup> To help elderly people live safely at home, welfare equipment such as safe handling equipment, indoor ramps, and wandering detectors was provided for elderly people with dementia and long-term care recipients.

As an example of local government efforts in Gwangjin District of Seoul Metropolitan City, a non-face-to-face recognition programme has been operating for elderly people with dementia and their families since 15 June. It is a kind of dementia treatment course, operated by the dementia safety centres in public health centres. For senior citizens suffering from dementia, experts

20. <https://www.fnnews.com/news/202009171006525120>

21. These services are to provide care while a person's family is away and at night, several short visits of 20–30 minutes.

## BOX 4

## Higher infection rate of COVID-19 among elderly people with dementia

According to the Korea Brain Research Institute (KBR), Dr Joo Jae-yeol and Dr Lim Ki-hwan have discovered that the number of angiotensinase (ACE2) receptors for COVID-19 increases for older patients with Alzheimer's disease. COVID-19 is reported to have the highest mortality rate among seniors in their 70s or older and relatively high mortality rates for those with underlying diseases such as pneumonia and diabetes. A research team at KBR has found that older dementia patients are more vulnerable to COVID-19 than other senior citizens.

This research team analysed the amount of ACE2 gene expression through big data and sequencing of RNA that contains genetic information of brain tissue and blood in elderly patients suffering from Alzheimer's disease. The results found an increase in the expression of the ACE2 gene, which attracts COVID-19 into cells in older people with Alzheimer's dementia more than in other older people, and the same changes were confirmed in the brain tissue of mouse models of Alzheimer's disease. ACE2 is also called angiotensin conversion enzyme and relates to the receptor used when COVID-19 invades human cells. In addition, an analysis on the genes of groups of patients with early, mild and severe dementia showed that the expression of ACE2 gene gradually increases as dementia progresses. Because increase the combines with the virus that causes COVID-19 (severe acute respiratory syndrome coronavirus 2, SARS-CoV-2) to help intracellular intrusions, a high level of ACE2 expression can increase the risk of infection. This research is important in that it newly reported the correlation between Alzheimer's disease and the novel coronavirus. It is expected to be used as a new diagnostic approach for older people who have degenerative brain disease as a base disease. Dr Joo said, "I am happy that the KBR can provide new information for the prevention of COVID-19." He said, "If you have dementia symptoms, you should pay more attention to the prevention of COVID-19 and with a warm heart keep an eye on dementia patients." The results of the research were published in the online edition of the *Journal of Infection* in June 2020.

Source: [https://biz.chosun.com/site/data/html\\_dir/2020/07/13/2020071300586.html?utm\\_source=bigkinds&utm\\_medium=original&utm\\_campaign=biz](https://biz.chosun.com/site/data/html_dir/2020/07/13/2020071300586.html?utm_source=bigkinds&utm_medium=original&utm_campaign=biz)

encouraged them to participate in various cognitive stimulation activities to stay healthy. This was originally an education programme, conducted by senior citizens with dementia in the region with their therapists at the dementia safety centre in Gwangjin District Office. However, because of the spread of COVID-19, dementia safety centres were temporarily closed for elderly people

with weak immune systems (Box 4). The dementia safety centre has turned all programmes into "non-face-to-face education" from 15 June, out of fear of a drop in cognitive activities among elderly people with dementia. The caregivers help elderly people with dementia to learn and therapists periodically call caregivers to check the progress of the treatment at home.<sup>22</sup>

22. <https://news.joins.com/article/23804299>

Seoul Metropolitan Government increased the number of public dementia guardians from 64 to 80 in 2020. It aimed to support the vulnerable who need more help in the wake of the continuing COVID-19 situation. The public dementia guardian is a helper, supported by public institutions, for elderly people with dementia who need assistance owing to a lack of decision-making ability but cannot find any helper for economic reasons. "We will increase the number of public dementia guardians by 16 this year for dementia patients who are likely to be isolated because of prolonged COVID-19 outbreaks," said the head of the Civic Health Bureau of Seoul Metropolitan Government on 30 July. He said, "We will carry out various activities such as applying for and receiving emergency disaster support funds, accompanying hospitals, checking the safety of patients in nursing facilities and making non-face-to-face calls." Since then, 25 public dementia guardians have helped 27 dementia patients in Seoul Metropolitan City. The city published a Wise Guardian Life pocketbook and distributed to public dementia guardians from 31 July in order to strengthen work support through standardized work guidelines for them.<sup>23</sup>

The Office of Dong District in Gwangju Metropolitan City has stepped up its non-face-to-face business to prevent a gap in care for those with dementia, caused

by the continuing spread of COVID-19. By supplying an AI care robot, called "Hyodori", the Office of Dong District has established a care system for senior citizens without face-to-face contact. Hyodori maintains the healthy lives of dementia sufferers by reminding them to take meals, medications and exercise, and helping to stabilize their emotions by providing social opportunities. With speech recognition and motion detection, it enables communication. It also runs a programme to enhance non-face-to-face recognition using YouTube channels. The video guides elderly people with dementia to solve memory-health playbooks and engage in indoor self-exercise methods. The dementia check-ups are conducted as one-by-one on a pre-booking basis without interruption. Screening tests, genetic tests and depression tests for senior citizens are conducted at designated dates and times, to observe social distancing. The dementia care package, which is distributed to some 980 people registered at of the Dementia Safety Centre, is enclosed with items to prevent infectious diseases. Hand sanitizers, wet wipes, face masks, COVID-19 preventive rules, etc. are included in the package. An official from Dong District Office said on 21 October, "We tried to change the dementia management project according to the environment of the COVID-19 era. We will minimize the vacuum in dementia care through active administration."<sup>24</sup>

23. <https://www.hankookilbo.com/News/Read/A2020073013530000212>

24. <https://www.yna.co.kr/view/AKR20201021119800054?input=1195m>

## 2. Income security

### 2.1. Work and employment

After the Senior Citizens' Job Project was resumed by the government in May 2020, the number of elderly employees increased. For example, there was a net increase of about 100,000 jobs in September, mostly in part-time and non-regular jobs.<sup>25</sup>

In fact, in April 2020, the employment rate for those aged 55 to 79 was 55.3 per cent, down 0.6 per cent year-on-year, according to *Additional Survey Results of the Economically Active Population Survey for the Elderly*, released by Statistics Korea in May 2020.<sup>26</sup> The decline in the employment rate of older people was mostly among people in their late 50s and early 60s (Box 5). The employment rate for those aged 55-64 was 66.9 per cent, down 1.0 per cent year on year, while the employment rate for those aged 65-79 rose 0.3 per cent to 40.4 per cent. In the Senior Citizens' Job Project, those aged 65 or older are targeted for public interest and talent-sharing activities and those aged 60 or older are targeted for jobs in the labour market.

According to Statistics Korea, impact of the COVID-19 reduced the number of jobs in the face-to-face service sector, especially with the employment rate of those

aged 55-59 falling significantly. However, the number of public sector jobs increased by 100,000 and the employment rate increased year-on-year as jobs related to social welfare facilities were created. A total of 67.4 per cent of older people wanted to work in the future; this ratio rose by 2.5 percentage points from the same month last year. Among the reasons for wanting to work, 58.8 per cent, the largest percentage of respondents, wanted to have supplemental income for their living expenses, and 33.8 per cent wanted to have the pleasure of working as long as their health permitted. The older people who wanted to work answered a question on the age they wanted to work up to. The average age, swered was 73 years old. The proportion of older persons who received pensions in the previous year was 47.1 per cent, an increase of by 1.2 percentage points year-on-year. The average monthly pension income was \$ 570, an increase of \$ 18 year-on-year (\$ 742 for men and \$ 380 for women, on average). The share of recipients receiving between \$ 226 and \$ 452 was the highest at 40.6 per cent and the share of recipients receiving over \$ 1,356 was 9.6 per cent.

Despite the shock to employment, the spread of COVID-19 increased the number of people employed in agriculture,

25. Ministry of Employment and Labour, *Employment Trends for September 2020*, 2020.

26. [https://biz.chosun.com/site/data/html\\_dir/2020/07/28/2020072801762.html](https://biz.chosun.com/site/data/html_dir/2020/07/28/2020072801762.html)

### BOX 5. *Coronomy leading to suicide of the elderly*

*"Coronomy" is a compound word formed of "coronavirus" and "economy", used to refer to the economic difficulties caused by the COVID-19 situation. According to the JoongAng Sunday dated 5 September 2020, the sales of small business owners and self-employed people have been hit directly by the spread of COVID-19. Concerns about the absence of care for elderly people living alone are also growing as a result of the strengthening of the government's quarantine guidelines. On 30 August, sisters in their 60s, who ran a karaoke bar in Pyeongchon-dong, Anyang City, attempted suicide in their establishment. The younger sister survived, but the older sister died. Their karaoke bar was a very small place with only two rooms. It is known that their wills left at the scene of the accident mentioned financial difficulties and a burden of debt. These sisters were unable to operate their business for about four months owing to an administrative order banning gatherings from last May. A police official said, "It seems that COVID-19 has caused a great stress to them."*

Source: <https://news.joins.com/article/23865012>

forestry and fisheries. According to the analysis of Statistics Korea, this trend was largely due to the suspension of the Senior Citizens' Job Project since late February, when the spread of COVID-19 began in earnest. The decrease in the entry of foreign workers due to COVID-19 also had an impact. As it became difficult to find migrant workers, the key labour force during the busy farming season, farm households hired older persons whose public sector work had been cut off and started a new upsurge in farming work. The government believed that agriculture and fisheries were significantly less productive in establishing themselves as a major domestic job market than other industries. This was because most of those employed are low-income senior citizens or unpaid family workers. Paradoxically, the COVID-19 crisis led to the discovery of the value of agriculture and fishing. Park Beom-geun, a senior researcher at the Science and Technology Job Promotion

Agency, explained, "Smart farms using new technologies still have low cost-to-cost profits. If the government supports it, it will be possible to cultivate high-value-added crops that can be used as cosmetics or medicines."<sup>27</sup>

However, the number of employed older people included a great number of people on temporary leave. According to BOK's *Issue Note: Status and Evaluation of Temporary Leave of Employment*, released by the Bank of Korea (BOK) on 3 September, temporary leave increased during each of the economic crises in the past but the increase during the COVID-19 crisis was exceptionally large. From March to July, temporary leave of temporary workers (815,000 people) and self-employed people (376,000 people) increased significantly. By age, the number of people aged 60 and over who faced temporary leave increased to 650,000. BOK considered it a result of the pandemic

27. <https://news.joins.com/article/23763483>

**BOX 6. COVID-19 threatens elderly people's job opportunities**

Picture: At an integrated recruitment event for senior job and social activity support projects held at a district office in Seoul Metropolitan City, many senior citizens visited the venue to fill out applications.

According to a Chosun Ilbo article dated 16 March 2020, an employment cliff has occurred because of COVID-19. As an example, Kim Myung-ho, who is 78 years old and lives in Incheon Metropolitan City, lost half of his livelihood because of COVID-19. When the Senior Citizens' Job Project, operated by the community centre, was stopped, his monthly income of \$ 244 from picking up rubbish in parks and streets disappeared. Mr Kim said, "It offered just one day of work in February and there was no work for a day this month, so it's hard to get a meal because there's no income other than \$ 271 in the basic pension." Even the Senior Citizens' Job Project, which is the government's representative job policy, is being hit by the coronavirus economy or "coronomy", and the number of people facing a livelihood crisis is increasing rapidly.

Source: [https://www.chosun.com/site/data/html\\_dir/2020/03/16/2020031600110.html?utm\\_source=bigkinds&utm\\_medium=original&utm\\_campaign=news](https://www.chosun.com/site/data/html_dir/2020/03/16/2020031600110.html?utm_source=bigkinds&utm_medium=original&utm_campaign=news);  
[https://biz.chosun.com/site/data/html\\_dir/2020/06/10/2020061002510.html?utm\\_source=bigkinds&utm\\_medium=original&utm\\_campaign=biz](https://biz.chosun.com/site/data/html_dir/2020/06/10/2020061002510.html?utm_source=bigkinds&utm_medium=original&utm_campaign=biz)

hitting a lot of face-to-face businesses, including the Senior Citizens' Job Project (Box 6).

Both central and local governments have made efforts to normalize the job crisis due to COVID-19. On 3 July, the vice minister of the Ministry of Strategy and Finance said, "Most projects are being promoted normally, compared with the plan, but some elderly job projects and public facilities became normalized after temporary suspension due to the spread of COVID-19." In addition, he said that the Senior Citizens' Job Project would be quickly normalized by introducing the non-face-to-face work method so that vulnerable people who had not yet returned to work could quickly establish themselves.<sup>28</sup>

As an example of local governments' efforts, Gyeongbuk

Provincial Government recruited, on 28 October, elderly workers for heat-sensor monitoring as a social service to prevent COVID-19. The project was expected to solve the problem of the accumulated fatigue of overworked public officials who spend long periods of time monitoring people's temperatures, and to increase job opportunities for the elderly.<sup>29</sup>

## 2.2. Social protection and public transfers

If nursing care workers are infected with COVID-19, care for the elderly, who must be visited and taken care of, cannot be carried out. Although the health authorities recommend that elderly people who have come into contact with COVID-19 infected people self-isolate for

28. [https://www.chosun.com/site/data/html\\_dir/2020/07/03/2020070300510.html?utm\\_source=bigkinds&utm\\_medium=original&utm\\_campaign=news](https://www.chosun.com/site/data/html_dir/2020/07/03/2020070300510.html?utm_source=bigkinds&utm_medium=original&utm_campaign=news)

29. <https://www.yna.co.kr/view/AKR20201028078900053?input=1195m>

two weeks and that nursing care centres avoid contact, it is not easy, since many older persons with illness cannot go to the bathroom without the help of nursing home staff, nor can they eat by themselves.

Although the closure of social welfare facilities including nursing facilities is an inevitable measure to prevent COVID-19 infection in the community, it can create blind spots in the care of the elderly people. With the spread of COVID-19, the biggest impact has been on socially vulnerable groups such as elderly and homeless people. The free lunch centres, namely soup kitchens, have been shut down. For example, the soup kitchen for elderly people at Wongaksa Temple, which had been running for 28 years and providing free lunches for 200 to 300 people every day, was closed. This decision was made owing to concerns about many people gathering in the small space to eat, the decreasing number of volunteers for food service and running out of donations. The Babper Food Service Headquarters, a non-profit organization that served free meals three times a week, also temporarily stopped serving food. The number of soup kitchens being suspended to prevent the spread of COVID-19 is expected to increase further. A member of staff at a soup kitchen said, "I am worried that there are many people who will go hungry for a day without this free meal. I have not seen a free food service close even a day during the other economic crises.

For senior citizens, hunger is scarier than COVID-19 and loneliness is more painful than hunger."<sup>30</sup>

Hence, some local governments have made efforts to minimize the welfare blind spot for the elderly. The elderly welfare facilities and the free indoor cafeterias, which had been closed since the spread of the COVID-19 infection, opened after nine months as social distancing was eased to level 1. Hand disinfection, fever checks and welfare centre membership cards are required to enter, but meeting places and sports facilities where there is a lot of contact are not available. For example, Seoul Metropolitan Government is providing meals to about 28,000 low-income senior citizens using senior restaurants instead of closing the elderly welfare facilities; elderly people who are mobile visit the senior food service at allocated times to bring their own home-cooked meals, and the food is delivered to those who are not mobile.<sup>31</sup> The free lunch centres, which used to distribute substitutes, have also resumed indoor meals. Tapgol Park, which was closed for a while, is open only during mealtime; the table is covered with a plastic screen and the guides instruct visitors to wear a mask before and after the meal.<sup>32</sup> The city operates a caring SOS centre in 25 autonomous districts to minimize the care vacuum to provide customized caring and welfare services for people over 50 years of age.

30. [https://imnews.imbc.com/replay/2020/nwdesk/article/5886798\\_32524.html](https://imnews.imbc.com/replay/2020/nwdesk/article/5886798_32524.html)

31. <https://news.joins.com/article/23864892>

32. [https://www.ytn.co.kr/\\_ln/0103\\_202011010807536012](https://www.ytn.co.kr/_ln/0103_202011010807536012)

## 3. Social issues

### 3.1. Intergenerational and family relations

During the spread of COVID-19, the elderly residents in nursing facilities and nursing hospitals are not allowed to meet their families to prevent COVID-19 infection. However, there have been many requests for visits and complaints of depression due to the continuing COVID-19 situation from senior citizens and their families. Therefore, there has been an increase in the number of local governments and elderly welfare facilities to implementing measures to overcome the disconnection of elderly residents from their families.

One example is from Jeju City in Jeju Province. If families apply to visit elderly residents in nursing facilities in advance, they are permitted to see each other through a transparent barrier without physical contact or eating food together. Another example is the Office of Yuseong District in Daejeon Metropolitan City providing safe visits through video calls with families. Zoom, a multi-party video conferencing platform, has been installed at five welfare facilities for elderly people with a capacity of more than 100 people. Through this, senior citizens who reside in nursing facilities can talk face to face with

several family members at the same time. The Office of Yuseong District plans to significantly expand its video conferencing platform installation facilities next year.<sup>33</sup>

#### *Zoom chat with an elderly parent in a welfare facility*



Source: <https://www.yna.co.kr/view/AKR20201102068200063?input=1195m>

### 3.2. Violence, abuse, neglect

It has been argued that the prolonged COVID-19 crisis increases the risk of abuse to children and elderly people (Box 7). Park Jae-ho, a member of the National Assembly, pointed out that most abuses of children and elderly people occurs home but the reporting rate is

33. <https://www.yna.co.kr/view/AKR20201102068200063?input=1195m>

### BOX 7. Abuse of the elderly in nursing facilities

YTN reported on 17 October 2020, "A caregiver pushes an old man. The old man staggers backwards and eventually falls down. The caregiver picks up the old man roughly and practically throws him onto his bed. This is what actually happened in a nursing facility that cares for elderly people suffering from dementia or stroke. Abuse by nursing care workers pushing and spitting on the faces and bodies of elderly people staying in facilities has been increasing rapidly."

Kim Min-cheol, Team Leader, Seoul Southern Elderly Protection Agency, commented, "The increase in the work intensity of nursing home workers is one factor. As visits are restricted, the elderly people's depression or anxiety increases and these things constantly accumulate and cause conflict."

According to Kim Won-i, a Member of the National Assembly, the number of elder abuse cases in elderly welfare facilities was 238 in 2016, 327 in 2017, 380 in 2018, 486 in 2019 and 377 from January to August 2020. During this period, 87.1 per cent occurred in medical and welfare facilities for elderly people with mental and physical ailments such as dementia or stroke (Kim Won-i National Assembly Member's Office, 2020). The problem is even more serious in that there is a lot of abuse targeting elderly people who have little defensive ability and find it difficult to complain about harm. Kim Won-i said, "People who have left their parents in a nursing facility for the elderly and cannot visit because of COVID-19 are anxious."

Source: [https://www.ytn.co.kr/\\_ln/0101\\_202010170740173141](https://www.ytn.co.kr/_ln/0101_202010170740173141)

low.<sup>34</sup> Owing to continuing COVID-19 crisis, family visits to elderly welfare facilities such as nursing facilities are severely restricted. In the meantime, abuse of the elderly is increasing rapidly. The incidence of elderly abuse in elderly care facilities has more than doubled from 238 cases in 2016 to 486 cases in 2019. The problem is that 377 cases happened only from January to August 2020, which was on average about 47 cases per month, a much higher rate than in 2019. As the COVID-19 crisis began in earnest, the abuse of the elderly rose markedly in situations where visits by outsiders such as family members were strictly restricted.<sup>35</sup>

One example is the results of an analysis conducted by Korean Broadcasting System (KBS).<sup>36</sup> KBS analysed the prescriptions of 19 antipsychotics from November 2019 to April 2020 by all the 1,500 nursing hospitals in Korea, as noted in applications' for benefits to the Health Insurance Review and Assessment Service. About 1,300 nursing hospitals were prescribing an average of 2.33 million drugs a month. The patients with mental illness such as schizophrenia who really need antipsychotics totalled 2,457, on average, accounting for only 3.7 per cent of all prescription patients in nursing hospitals. Most medications were given to dementia patients,

34. <http://news.kbs.co.kr/news/view.do?ncd=5027764&ref=A>

35. [https://www.ytn.co.kr/\\_ln/0101\\_202010170740173141](https://www.ytn.co.kr/_ln/0101_202010170740173141)

36. <http://news.kbs.co.kr/news/view.do?ncd=5030133&ref=A>

an average of 58,000 patients. They accounted for 89 per cent of all medications. More shockingly, 7.3 per cent or 6,372 patients were general patients who had neither dementia nor mental illness. The prescription of antipsychotics in nursing hospitals increased even more during the ban on visits due to the COVID-19 crisis. The average prescription volume in January and February 2020, when the first COVID-19 diagnoses were made, increased by 2.6 per cent from the average prescription volume in November and December 2019 before the outbreak of COVID-19, and the average prescription volume in March and April 2020, when COVID-19 became more prevalent, increased by 7.5 per cent. It was suspected that the caregivers were abusing medicine to make the elderly patients, even without dementia or mental illness, sleep for the purpose of management in nursing hospitals; after taking the medicine, elderly patients sleep or lie motionless even in the morning or in bright daylight. After the KBS report, the Health Insurance Review and Assessment Service announced, "We will monitor and impose sanctions on nursing hospitals that overprescribe antipsychotics by creating drug indicators that the elderly should be careful of." The Korea Nursing Hospital Association also announced its official position, "Prescriptions are being given based on medical judgment, but if prescriptions are overused, after careful investigation, we will reduce them." The

government made mandatory a detailed treatment log submission for monitoring appropriate drug use; billable records will be analysed and confirmed on site, drug utilization review confirmation details will include antipsychotics and create appropriate use guidelines, and an item on the safe use of antipsychotics will be included in the evaluation forms of nursing hospitals.

### 3.3. Safety, security, conflict

When senior facilities closed because of the COVID-19 outbreak, elderly people who were living alone immediately became concerned about their own diet and safety. As facilities in rural areas, which used to be shelters where they shared their accommodation and meals, were closed to prevent the spread of COVID-19, elderly people who are vulnerable found themselves isolated and in a safety blind spot.<sup>37</sup>

On the other hand, many of the elderly welfare facilities for vulnerable groups are operating regardless of the pandemic. Day and night care centres for the elderly are also operating normally despite the government's recommendation to close. According to the Ministry of Health and Welfare, only 4.5 per cent of the centres nationwide closed their doors. Although the National Health Insurance Service has prepared a temporary method of supporting 42-60 per cent of usual revenue

37. <http://news.kbs.co.kr/news/view.do?ncd=5030133&ref=A>

for those centres that are closed, the government's recommendation to close the centres was hardly applied. Many centre operators said, "The support of the corporation is not enough to pay rent and management fees and users also want normal operation of the day and night care centres for the elderly. Therefore, it is not easy to close." As an example a day and night care centre for the elderly in Busan Metropolitan City was closed in accordance with government guidelines but was reopened because of growing protests from dual-income children of elderly people. Thus, the welfare facilities for the elderly could become a blind spot for infectious disease management if it is not carried out systematically.<sup>38</sup>

During the summer, the heat reached more than 30°C causing an emergency in the quarantining of the elderly. Elderly people with chronic diseases are likely to suffer from heat stroke due to their inability to properly excrete sweat to control their body temperature. The quarantine authorities believed that, if a COVID-19 infection was added to this, it was more likely to be fatal. The deputy head of CDSC HQ explained, "In fact, the high-risk groups of COVID-19, which include the elderly over 65 with chronic diseases, are also vulnerable to heat diseases caused by a heat wave."<sup>39</sup>

As of 30 May, only 33.8 per cent out of 50,100 indoor

hot shelters were still open and in operation. The main reason for the low operating rate of indoor shelters was that the majority were welfare facilities for the elderly. CDSC HQ included senior citizen centre as a recommended facility to close from late February. And hence, even when the senior citizen centres were reopened, elderly people could not take proper advantage of them because of limitations on the time each person could spend there. Front-line local governments have been cautious about the operation of senior citizen centres over concerns about the spread of COVID-19.<sup>40</sup> Therefore, senior citizen centres were closed during the summer as a consequence of COVID-19, and the elderly had no choice but to go outside. For example, in Jeju Province, over 80 per cent of senior citizen centres were closed because of concerns about COVID-19 infection during the summer. Taking into account the worsened situation during the summer, some local governments made attempts to reopen the senior citizen centres; in case of Jeonbuk Province, most of the senior citizen centres were reopened from late July on condition that they followed the quarantine regulations.

### ***Discrimination, ageism, dignity***

On 23 June, the Human Rights Commission reported,

38. [https://www.chosun.com/site/data/html\\_dir/2020/03/11/2020031100214.html?utm\\_source=bigkinds&utm\\_medium=original&utm\\_campaign=news](https://www.chosun.com/site/data/html_dir/2020/03/11/2020031100214.html?utm_source=bigkinds&utm_medium=original&utm_campaign=news)

39. [https://imnews.imbc.com/replay/2020/nwdesk/article/5807059\\_32524.html](https://imnews.imbc.com/replay/2020/nwdesk/article/5807059_32524.html)

40. [https://imnews.imbc.com/replay/2020/nwtoday/article/5855359\\_32531.html](https://imnews.imbc.com/replay/2020/nwtoday/article/5855359_32531.html)

through a report of the 2020 *National Perceptions of Discrimination Survey*, that 69.3 per cent of all respondents answered that social groups are being discriminated against as a result of the COVID-19 pandemic. Based on multiple surveys, 59.2 per cent of religious persons were discriminated against, which was the highest percentage. This was followed by 36.7 per cent of people from specific regions and 36.5 per cent of foreigners and migrants. In addition, people with diseases (32.3 per cent), poor people (8.5 per cent), the elderly (8.1 per cent) and people with disabilities (4.9 per cent) were cited in that order as targets of discrimination. Forty per cent of the respondents said that discrimination was more severe than in the past.<sup>41</sup>

In reality, there have been cases of discrimination against COVID-19-infected persons.<sup>42</sup> In one example, a woman made an extreme choice while being quarantined owing to her contact with a COVID-19-infected person. She was a nursing caregiver and had caught COVID-19 from an elderly infected person. Although she was cured, she went on to suffer from social anxiety. She was hesitant to even go out on the streets, fearing that she could still transmit the virus to someone. Even her family and neighbours avoided contact with her. In the workplace, where she wanted to return, no one accepted her. She wore a hat and kept her head down even on a hot day in case she met

anyone she knew. Another case involves a daily worker in his 60s who had been infected; even after being cured, he was barred from the workplace because he had been infected with COVID-19. Thus, COVID-19-infected patients and those in self-isolation who are in financial difficulty sometimes complain of psychological anxiety. In this regard, the government is operating emergency welfare support, including a benefit of \$ 32 per day; however, this is no longer provided once the treatment is completed even though these patients face real difficulties due to discrimination in the labour market after treatment.

During the time when the supply of masks did not meet demand, it was not easy to obtain a mask from public bodies. Specifically, elderly people were uncomfortable, had no information and had trouble queuing. An old man in his 70s went out at 8 a.m. to buy five masks and queued for 6 hours. Elderly and disabled people, who had difficulty going out because of their physical discomfort, could not even buy a mask. Socially vulnerable people, who were vulnerable to infectious diseases due to weakened immunity, were put off even purchasing masks, waiting in anxiety for the end of COVID-19.<sup>43</sup>

According to the *2019 Digital Information Gap Survey*, released by the Ministry of Science and ICT in March, the level of finding information using digital devices

41. <http://news.kbs.co.kr/news/view.do?ncd=4504302>

42. <http://news.kbs.co.kr/news/view.do?ncd=4504302>

43. [https://imnews.imbc.com/replay/2020/nwdesk/article/5667967\\_32524.html](https://imnews.imbc.com/replay/2020/nwdesk/article/5667967_32524.html)

for elderly people aged 65 years or older was only 64.3 per cent of the average level for the whole; that was the lowest among the vulnerable groups including people with disabilities, the poor, etc. There was also difficulty in external activities because senior citizens had to face various unfamiliar technologies such as QR code verification. Only 38.3 per cent of senior citizens over 70 years old owned smartphones and only 38.8 per cent used the internet, which were low proportions in comparison with the same figures for younger generations.<sup>44</sup> Since non-contact services have become a rising trend in restaurants, train stations, cinemas, etc. as a result of COVID-19, the digital gap has also become an increasing problem for senior citizens and vulnerable groups, who find it alienating. Although ordering from kiosks and shopping online becomes a closer routine after COVID-19 outbreak, senior citizens are faced with greater difficulties. In fast-food restaurants, senior citizens have difficulty using the kiosk to order. It also takes a long time for them to select a seat at bus terminal kiosks and search for destination. Therefore, senior citizens have to queue to purchase a train ticket rather than use the automatic kiosk. According to the results of an observation survey conducted by the Korea Consumer Agency, three out of five elderly consumers who went to a bus terminal and all five who went to a fast-food store could not pay at the kiosks.

Only a few sought the help of kiosk staff or referred to written instructions. There was no place that provided kiosk screens specifically for the elderly.<sup>45</sup>

People sometimes raise opposition by saying, "I do not like those facilities for the elderly in front of my house or in my neighbourhood." As an example, in Mapo District of Seoul Metropolitan City, a day care centre and a day care facility for elderly people were built, but their opening was delayed owing to strong resistance from local residents.<sup>46</sup>

### 3.4. Social isolation, social connection, accessibility

CDSC HQ introduced high-intensity measures for nursing hospitals and nursing facilities, such as diagnostic tests for new residents and refraining from admitting outsiders on 28 January, visitation restrictions on 24 February, visitation bans on 13 March, etc. The need to allow family visits was raised to relieve the concerns of families over the long-term ban on visitations and to help maintain the emotional stability of the elderly residents in nursing hospitals and nursing facilities. Accordingly, non-contact visits have been conducted under high-intensity infection prevention measures from 1 July. Local governments decide on their own if visits should be conducted

44. <https://www.yonhapnewstv.co.kr/news/MYH20201107000500641?did=1825m>

45. [http://news.jtbc.joins.com/article/article.aspx?news\\_id=NB11968706](http://news.jtbc.joins.com/article/article.aspx?news_id=NB11968706)

46. [http://news.jtbc.joins.com/article/article.aspx?news\\_id=NB11944422](http://news.jtbc.joins.com/article/article.aspx?news_id=NB11944422)

according to the current status of the COVID-19 spread by region; in this regard, the institution operator (quarantine manager) should establish a visiting plan to minimize the risk of infection of patients and residents. The visitation plan is to include the following.

The first requisites are concerning preparations for visits: visiting is operated using an advance reservation system, a separate meeting space (separate space at the entrance, outdoors, etc.) is provided, patients residents, and guardians are notified of visitation guidelines in advance, and quarantine supplies (masks and hand sanitizers) are provided. The second requisites concern the process of visiting: visits must be conducted in a separate space or outdoors where a transparent barrier is installed and direct physical contact or food intake other than indirect contact through vinyl, etc. is restricted. However, in the exceptional case of a patient or inhabitant dying or becoming injured, it is possible that a visiting place will be provided in a single room or in a separate space with the visitor wearing personal protective equipment. The third requisites also concern the process of visiting: the visiting space must be disinfected and ventilated at regular intervals and used masks need to be collected and disposed of separately. Patients, residents and visitors who participated in

the visit must monitor suspicious symptoms, such as through temperature checks, after returning home.<sup>47</sup>

Another measure to overcome the depression of elderly people in nursing facilities and nursing hospitals has been to arrange non-contact meetings; for example, a nursing hospital in Jung District of Ulsan Metropolitan City arranged meetings between elderly patients and their families through video calls.<sup>48</sup> In order to prevent COVID-19 infection, nursing hospitals are to forbid patients to contact outsiders, but some nursing hospitals have prepared measures for family members to meet, especially on Mother's Day. There are also nursing hospitals where plastic tents were built for visits.<sup>49</sup> In some nursing facilities and nursing hospitals, there have been cases in which families met face to face with plastic membranes in between. On Chuseok, a Korean thanksgiving day, those who could not see their parents in the nursing facilities were greeted by video messages and group calls.<sup>50</sup>

### 3.5. Contributions by older persons

Amid the COVID-19 outbreak, the activities of the "Corona Medical Corps" to overcome the crisis are continuing. Those activists are composed of elderly

47. [https://imnews.imbc.com/replay/2020/nwtoday/article/5855359\\_32531.html](https://imnews.imbc.com/replay/2020/nwtoday/article/5855359_32531.html)

48. [https://news.sbs.co.kr/news/endPage.do?news\\_id=N1005746759&plink=ORI&cooper=ETC](https://news.sbs.co.kr/news/endPage.do?news_id=N1005746759&plink=ORI&cooper=ETC)

49. [https://news.sbs.co.kr/news/endPage.do?news\\_id=N1005778739&plink=ORI&cooper=ETC](https://news.sbs.co.kr/news/endPage.do?news_id=N1005778739&plink=ORI&cooper=ETC)

50. [https://news.jtbc.joins.com/article/article.aspx?news\\_id=NB11972007](https://news.jtbc.joins.com/article/article.aspx?news_id=NB11972007)

doctors who are about to retire, retired nurses, street vendors, nuns anonymous donors.<sup>51</sup> At the beginning of the COVID-19 outbreak, doctors from across the country rushed to Daegu Metropolitan City at their own risk, closing their own clinics and volunteering. A 66-year-old doctor who runs a private clinic in Gyeongsan City, Gyeongbuk Province said, "There is a place where an old physician like me can be used. Anyone who has the power to help should help." Former and current doctors in their 70s or older also helped. About 1,000 medical staff volunteered, including 320 doctors from the public health sector and the military, and 630 clinical pathologists and radiologists.

Retired nurses also donned their gowns again and the struggle of 3,500 nurses who volunteered to treat confirmed cases nationwide was touching. Their duties were not limited to basic nursing care such as administering medication and injections; they were

also in charge of cleaning the toilets of patients in the negative pressure isolation rooms, where only medical personnel were allowed. They slept in the corners of the hospital and lived on light meals. They wore sweat-soaked protective clothing, their foreheads had clear goggle marks and they had to apply facial bandages to their wounds when changing protective clothing.

Grandmothers and grandfathers from all over the country stepped up as "mask meds". About 400 people belonging to 24 senior citizens' projects nationwide under the Korea Senior Citizens Development Institute made masks. At a senior club in Goyang city, 10 grandmothers produced 400 masks a day. The Cotton Mask Medical Corps, made up of residents of Seoul Metropolitan City, struggled to make 1,200 cotton masks a day. In Yeongdeungpo District of Seoul Metropolitan City, the Women's Corps also donated 5,000 masks.

51. [http://news.jtbc.joins.com/article/article.aspx?news\\_id=NB11949455](http://news.jtbc.joins.com/article/article.aspx?news_id=NB11949455)

## 1. Response from government

### 1.1. Key governmental structures

The first patient confirmed as testing positive for COVID-19 in the Republic of Korea, on 20 January 2020, was from Wuhan, China. Accordingly, the central anti-disaster task force and the local government task force were established. On 23 February, the government upgraded the risk alert level for infectious diseases from “warning” to “serious” as a pre-emptive measure against the possibility of the nationwide spread of COVID-19.

As of 25 February, the Korean government's response

system to COVID-19 has been coordinated by CDSC HQ, headed by the Prime Minister, to focus on the prevention of pandemics. Considering the specificity and expertise needed in responding to infectious diseases, CDSC HQ is led by Central Disease Control Headquarters, while the first deputy director of CDSC HQ, who is also in charge of the Central Disaster Management Headquarters as the Minister of Health and Welfare, is to support the quarantine work of the Central Disease Control Headquarters. The second deputy director is the Minister of Public Administration and Security, who, as the head of the Pan-government Countermeasures Headquarters,

Figure 5. Korean government's response system to COVID-19



Source: CDSC HQ, press release, 25 February 2020.<sup>52</sup>

52. <http://ncov.mohw.go.kr/baroView2.do>

is to support necessary matters such as cooperation between central government and local governments. Each local government has also formed a Regional Disaster and Safety Countermeasures Headquarters, led by the head of the local government, to secure hospitals and beds dedicated to infectious diseases. CDSC HQ is to provide resources such as beds, staff and supplies if the Regional Disaster and Safety Countermeasures Headquarters cannot secure all that are needed.

## 1.2. COVID-19 health and safety

### *Total inspections*

The government took various measures as infections at vulnerable facilities such as nursing facilities and nursing hospitals increased. One of the measures was to examine the care workers. Care workers at nursing hospitals were exposed to a high risk of COVID-19 infection through having a lot of daily contact with patients. Since they were not directly employed by nursing hospitals, management of infection for them was hard. Therefore, from 20 March, the Ministry of Health and Welfare implemented an inspection system to temporarily record the personal information of caregivers and check daily health statuses to exclude them from work if they have any symptoms. A COVID-19 test is mandatory for care workers who are newly employed. The cost of tests for nursing hospitals and care workers is to be borne by local governments.

The government analysed the risk factors of nursing facilities and nursing hospitals with mass infections of COVID-19. The results showed defects in infection prevention including a lack of prevention directors, of proper education on prevention guidelines and of lack of pre-screening for new patients and admissions, failure to monitor workers' symptoms, an inability to limit visitors, and crowded patient rooms without enough space between beds. Taking the results of this analysis into consideration, more thorough prevention activities were enforced in those facilities at high risk. The government conducted COVID-19 tests on all workers and users in nursing facilities and nursing hospitals.

In fact, the government conducted a full survey of nursing hospitals nationwide on 11 and 12 February. It was required to check if compliance was being observed well, and especially if access restrictions for outsiders were properly carried out. In addition, patients with unknown pneumonia in nursing facilities were all subject to coronary examination. From 19 October, 160,000 workers at nursing hospitals, mental hospitals and elderly day care centres in the Capital area were tested for COVID-19.

However, workers in various facilities were in contact with infected person(s) from different regions and in turn infected the elderly people at the elderly welfare facilities. Thus, a test was effective only to check if the worker was infected at that time. Accordingly, CDSC

HQ started to implement tests on a regular basis; a total COVID-19 inspection is to be conducted every two weeks from 10 November 2020 in the Capital area, and every four weeks in non-Capital areas from 20 November 2020.

### **Cohort isolation**

Infection cannot occur on its own in elderly living facilities such as nursing facilities and nursing hospitals. Mainly, care workers and staff in nursing facilities and nursing hospitals are spreading the infection when in contact with the outside world. Because there are asymptomatic infections, no matter how much control they have, there is always a possibility of spreading COVID-19. Once an infection occurs, it is often fatal in an enclosed dense living facility such as nursing facility and nursing hospital. Elderly people living in senior living facilities will immediately become seriously ill if they are infected, and the death toll will rise. Therefore, the government is recommending the isolation of cohorts for preventive purposes. Cohort isolation is a way to intentionally reduce contact with the outside world in those nursing facilities and nursing hospitals have tested positive for COVID-19. Facility workers live at the facility with their children, not coming out or going in for a few weeks. The nursing facilities or nursing hospitals themselves aim to

protect elderly people with weak immune systems by cohort isolation.<sup>53</sup>

For example, more than 70 patients of a nursing hospital in Daegu Metropolitan City tested positive for COVID-19. In addition to this hospital, about 80 positive patients were found in five nursing hospitals in Daegu Metropolitan City as well. Daegu Hansarang Nursing Hospital was urgently locked down. Two days after the hospital's nursing director tested positive, the Daegu Metropolitan Government conducted full-scale testing of hospital staff and patients and found that 74 more were positive. It was judged by the quarantine authorities that the spread of infection had been progressing in this hospital, as many people had suspected symptoms since mid-March. In fact, there was a high risk of infection spread, as patients who were elderly or had underlying diseases were lying in beds 1.5 m apart, so they were exposed to the virus without protection.<sup>54</sup>

There was also the case of Gyeongbuk Province. As the number of tested positive cases of COVID-19 increased to 49 in just one day at the Pureun Nursing Home in Bonghwa county of Gyeongbuk Province, concerns over group infection had become a reality. In addition to the Pureun Nursing Home, a 95-year-old woman who was admitted to the Happy Nursing Home tested positive.

53. [https://www.ytn.co.kr/\\_ln/0103\\_202003111655221365](https://www.ytn.co.kr/_ln/0103_202003111655221365)

54. [https://imnews.imbc.com/replay/2020/nw1700/article/5673714\\_32510.html](https://imnews.imbc.com/replay/2020/nw1700/article/5673714_32510.html)

[https://news.sbs.co.kr/news/endPage.do?news\\_id=N1005704755&plink=ORI&cooper=ETC](https://news.sbs.co.kr/news/endPage.do?news_id=N1005704755&plink=ORI&cooper=ETC)

The remaining inmates and workers were quarantined in the facility, while the rest self-isolating. Two users tested positive at the senior welfare centre. The remaining day care users and employees were also tested for COVID-19. Therefore, under Article 46 of the Basic Law on Disaster and Safety Management, Gyeongbuk Provincial Government conducted preventive cohort quarantines at 581 living facilities among its social welfare facilities, providing accommodation, including nursing facilities and nursing hospitals, from 9 to 22 March. In accordance with the cohort isolation, medical staff and patients were isolated inside the facility; workers were prohibited from going out or leaving work for seven days when isolating the facility's cohort and were to stay inside the facility. External contact was completely blocked. Instead, additional allowances were provided for workers at the facilities, and preventive supplies were provided for the 581 living facilities. In addition, Gyeongbuk Provincial Government and the Gyeongbuk branch of the Korean National Red Cross paid \$ 463,000 in donations to the 581 living facilities.<sup>55</sup>

Gyeonggi Provincial Government also decided to isolate 1,824 facilities from the outside for two weeks, including 1,200 nursing facilities for elderly and disabled people. Gyeonggi Provincial Government quarantined, in advance, vulnerable facilities to which the virus had not yet spread, to prevent the possibility of collective infection.

Outsiders were prohibited from entering the isolated facility except for essential personnel such as medical personnel and cooks. It also restricted family visits. They disinfected items that were brought in from outside as necessary for the facilities. Even places that could not be isolated immediately were blocked from visiting, and workers were forced to self-isolate outside their working hours. The Gyeonggi Provincial Government planned to increase the number of facilities subject to quarantine and increase the duration if necessary.<sup>56</sup>

### 1.3. Programming and senior citizens

#### *Customized care services for senior citizens*

The government has been implementing customized care services for senior citizens since January 2020 by integrating six existing senior care services, including basic care services for senior citizens and social relations. The targets of the emergency care are (1) elderly people over the age of 65 who live alone, (2) elderly couples aged 75 or older, the elderly people who are diagnosed with fractures or have undergone surgery for severe diseases within the last two months among recipients of national basic living, near-poverty groups and those on basic pension, and (3) other senior citizens whom the government recognizes as needing urgent care.

55. <https://news.joins.com/article/23722923>

56. [http://news.jtbc.joins.com/article/article.aspx?news\\_id=NB11937652](http://news.jtbc.joins.com/article/article.aspx?news_id=NB11937652)

The designated senior citizens are to be provided with various services, including safety support services such as safety checks, chat-mate service, life education services that inform them of fall prevention methods, personal hygiene methods related to COVID-19, daily support to help them eat or clean up, and linked services that deliver subsidised goods. Emergency care services for senior citizens were newly introduced in 2020 and planned to operate only temporarily during January and February. However, the senior-customized care service project, which had planned to start accepting service applications from March 2020, was delayed by COVID-19, so it was decided that the service period should be continued until COVID-19 calms down. Starting in March, those elderly people eligible for the application included the elderly who went into self-isolation because of COVID-19 or who were left alone because caregivers (guardians) were hospitalized after confirmation of COVID-19 infection.<sup>57</sup>

The Ministry of Health and Welfare operated an application period for the Advanced Care Service for the Elderly from 8 to 30 June. In June, about 300,000 senior citizens were using the customized care service at 647 agencies nationwide. This intensive application was aimed at actively discovering vulnerable elderly people and providing them with expanded care services, as

the use of facilities such as the elderly welfare facilities and senior centres had been restricted in response to COVID-19, deepening social disconnection and loneliness among senior citizens.<sup>58</sup>

The government implemented limited non-contact visits to nursing hospitals and nursing facilities from July. Visiting was banned in principle until June because elderly patients with many underlying diseases were considered highly vulnerable to infection due mainly to hospitalization. However, family members were concerned about their elderly relatives' isolation and depression due to family visits being cut off. After consideration of the various difficulties caused by the continued ban, non-contact visits were allowed in a limited way during the period of "distancing in daily life". However, the government has allowed the city and provincial governors to decide for themselves if visits will be conducted, according to the rate of incidence by region, and introduced a plan to adjust the level of visits according to the situation and changes in social distancing. Thus, visiting was made on a pre-booking basis. In addition, each hospital and facility should be well ventilated, and separate spaces should be provided for separate routes between patients, inmates and visitors. Visitors should use hand sanitizer, masks and plastic gloves when during their visits, while each hospital and

57. <https://www.hankyung.com/society/article/202003180984h>

58. <https://www.hankookilbo.com/News/Read/202006071339359776>

facility should check for risk factors such as fever, and keep and manage access lists. Physical contact or food intake between patients and visitors is prohibited. In addition, transparent barriers such as glass doors and vinyl are installed to prevent contact. It is mandatory to disinfect and ventilate the visiting place at regular intervals and collect used masks and gloves separately. Even after the visit, suspicious symptoms such as fever in visitors, patients and residents should be monitored. Exceptionally, patients and inmates who are unable to move can meet their visitor in a separate room, with the visitor wearing personal protective gear.<sup>59</sup>

With experience of preventing COVID-19 spread, some local governments have made attempts to develop a quarantine model. Nam District in Daegu Metropolitan City is the district with the greatest damage from COVID-19 among the nation's basic local governments. The Office of Nam District has been working hard to create a quarantine model for COVID-19. For that purpose, the Office of Nam District held a presentation on strategies to overcome and respond to the COVID-19 crisis at social welfare facilities on August 24th, 2020. Employees of four social welfare facilities, including Nam-gu General Social Welfare Center, Daedeok Senior Welfare Center, Nam-gu Healthy Family and Multicultural Family Support Center, and Daemyung

Social Welfare Centre, shared various cases. Based on this sharing, an attempt was made to develop a national standard manual for COVID-19. They include a self-preparation manual on how to check elderly people's health, a manual on how to draw up health checklists to get a detailed picture of an elderly person's condition over the phone with medical institutions, a manual on the operation of a non-contact education programme for people with disabilities who have difficulty engaging in outside activities, and a manual on streamlining work between disaster relief and welfare departments.<sup>60</sup>

### ***Senior Citizens' Job Project***

In the Republic of Korea, the Ministry of Health and Welfare is in charge of creating and managing jobs for elderly people aged 65 years or older, while the Ministry of Employment and Labour is in charge of managing jobs for middle-aged people from 55 to 64 years old. The Ministry of Health and Welfare temporarily suspended the Senior Citizens' Job Project from 27 February but paid salaries for March (based on \$ 248 per month and 30 hours of work) to senior citizens who had participated in the Senior Citizens' Job Project. When the Senior Citizens' Job Project was resumed, it was a condition to work 10 hours a month for three months. However, April's salary was not paid on the grounds that the

59. [https://biz.chosun.com/site/data/html\\_dir/2020/06/26/2020062601623.html?utm\\_source=bigkinds&utm\\_medium=original&utm\\_campaign=biz](https://biz.chosun.com/site/data/html_dir/2020/06/26/2020062601623.html?utm_source=bigkinds&utm_medium=original&utm_campaign=biz)

60. <https://www.donga.com/news/article/all/20200907/102831551/1>

government could not afford the emergency disaster support fund, which was up to \$ 931 per household (based on four-person households).<sup>61</sup>

As the level of social distancing shifted to “distancing in daily life”, the government resumed 250,000 of the job projects for senior citizens, beginning on 6 May. Among the 7.5 million jobs for senior citizens scheduled for 2020, those jobs were selected that could be operated outdoors, or non-face-to-face jobs such as park ecology care workers. Of the remaining 500,000, some were planned to resume after they had been adapted so that they were no longer carried out face to face, but the schedule and others had yet to be finalized. Some jobs had already changed from being face to face. The services of younger senior citizens caring for the older senior citizens, such as visiting elderly people living alone and asking how they are doing, were conducted by telephone rather than face to face. Visiting book rental and return services or lunch box delivery businesses were changed to prevent face-to-face contact by placing books or lunch boxes at the door. Meanwhile, school zone safety guards, who help elementary school students get to school safely, were transferred to school quarantine activities before elementary schools started on 20 May.<sup>62</sup>

The Ministry of Employment and Labour also suspended the 16,000 new social contribution jobs for middle-aged workers on 2 March in the wake of the spread of COVID-19. An official from the Ministry of Employment and Labour said, “We will decide whether to resume the project or not by looking at the trend of confirmed patients after the social distancing changes come into effect in our lives.”<sup>63</sup>

### **Online exercise**

During the COVID-19 crisis, there have been new changes in the culture of senior citizen centres where elderly people used to live. For example, Jung District in Seoul Metropolitan City has created a centre for the elderly whose outdoor activities have been cut off by COVID-19. This centre operates in the form of a group chat on Kakao Talk, Korea's most popular messaging app. Fitness instructors can practise stretching routines, and senior citizens can follow along at home. Elderly people can even gather online and exercise together. The online senior citizen centre is currently open for 30 minutes every Tuesday and Thursday.<sup>64</sup> The Office of Seo District in Gwangju Metropolitan City also provides home training to the elderly who are restricted from outside activities because of COVID-19. The Seo

61. [https://www.chosun.com/site/data/html\\_dir/2020/05/06/2020050600176.html?utm\\_source=bigkinds&utm\\_medium=original&utm\\_campaign=news](https://www.chosun.com/site/data/html_dir/2020/05/06/2020050600176.html?utm_source=bigkinds&utm_medium=original&utm_campaign=news)

62. [https://www.chosun.com/site/data/html\\_dir/2020/05/06/2020050600176.html?utm\\_source=bigkinds&utm\\_medium=original&utm\\_campaign=news](https://www.chosun.com/site/data/html_dir/2020/05/06/2020050600176.html?utm_source=bigkinds&utm_medium=original&utm_campaign=news)

63. [https://www.chosun.com/site/data/html\\_dir/2020/05/06/2020050600176.html?utm\\_source=bigkinds&utm\\_medium=original&utm\\_campaign=news](https://www.chosun.com/site/data/html_dir/2020/05/06/2020050600176.html?utm_source=bigkinds&utm_medium=original&utm_campaign=news)

64. <https://news.joins.com/article/23905212>

District Office produces and distributes video clips and promotional materials to help the elderly to take the exercise.<sup>65</sup>

#### 1.4. Financing

The government set, on 4 March, an extra budget worth \$ 16.9 billion to overcome the COVID-19 crisis. It was the fourth-largest super extra budget ever. Combined with the COVID-19 countermeasures, the total budget rose to \$ 28.9 billion. Since early February, the government has implemented \$ 3.65 billion worth of emergency support measures for small business owners, and tourism and shipping sectors that were hit by COVID-19. On 28 February, the government announced a support package worth \$ 6.40 billion and a financial support package worth \$ 8.23 billion that included the payment of consumer coupons. Of the extra budget, \$ 2.10 billion was to be used to upgrade quarantine systems, including quarantine, diagnosis and treatment of infectious diseases. A total of \$ 320 million was to be spent to compensate medical institutions affected by the government's participation in quarantine measures. It was also to provide \$ 7.3 million to support living expenses for hospitalized and isolated therapists and to pay vacation expenses for employers. A total of \$ 2.19 billion was to be spent on small business owners

and small and medium-sized enterprises affected by COVID-19. It was to provide \$ 1.83 billion in emergency management loans to small business owners and small and medium-sized businesses and to increase ultra-low interest rate (1.48 per cent) loans to small business owners by \$ 1.83 billion through the Industrial Bank of Korea. In addition, small business owners who continued to hire low-wage workers were to be given a wage subsidy of \$ 64 per person for four months. In traditional markets, where 20 per cent of all market stores had lowered rents, fire safety facilities were fully funded by state coffers. The project to revive the sluggish local economy would cost \$ 731 million. Measures to stabilize people's livelihoods and employment worth \$ 2.74 billion were implemented. The government would also inject additional funds into support measures for youth employment, including a successful employment package.<sup>66</sup> Local "love gift" certificates were to be distributed to low-income families, senior citizens and families raising children. A total of 1.38 million households eligible for basic living protection received \$ 777 million worth of gift certificates, ranging from \$ 155 to \$ 201 (based on two-person households) per month. During the same period, families raising children between the ages of 0 and 7 (2.63 million) families were also given gift certificates of \$ 91 per child per month. The monthly salary of participants in the Senior Citizen's Job Project, worth \$ 246, was raised by

65. <http://news.kbs.co.kr/news/view.do?ncd=4501707>

66. <https://news.joins.com/article/23721594>

22 per cent to \$ 300 over the four-month period.<sup>67</sup> The government provided 20 per cent of the amount as an incentive if participants in the Senior Citizens' Job Project received part of their salaries as gift certificates. The government paid a total of \$ 117 million in coupons.<sup>68</sup>

On 10 September, a fourth supplementary revised budget bill was drawn up for \$ 6.64 billion to be provided as the second relief package. According to the bill, the second relief package allocated a total of \$ 7.13 billion. Small business and self-ownership businesses were allocated \$ 27.1 billion, with a maximum of \$1,828 being distributed to each business. Preschool and childcare support was allocated \$ 914 million, and an emergency employment security support fund for special employment workers, freelancers and other vulnerable employees was allocated \$ 54.8 million.<sup>69</sup>

An online application for disaster relief packages was opened for citizens on 11 May. It was open for five working days during the first week. If it was requested in credit or debit form, the householder needed to apply through the credit card app from 7 a.m. and use it within one or two days after submission. Starting on 16 May, applications could be submitted any time. If applying online was difficult, the recommendation was

to visit the bank that was affiliated with the user's credit card company. However, some credit card companies were available only online. Disaster relief could be also given in the form of Regional Love Gift Cards. For these, applications could be submitted from 18 May on regional websites or could be made by visiting community service centres to apply. For those with difficulty visiting centres in person, government employees visited to help with the application. The distributed disaster relief package was to be used by 31 August.<sup>70</sup>

In principle, emergency disaster support funds should be applied for directly by household owners. Only when it was difficult to apply because of long-term hospitalization, or when a person was overseas or could not be tracked down, could a family member acting as a legal representative with the same address or resident registration visit their community centre and apply for the subsidy in their place. However, there were been many complaints that elderly people who were not able to apply for the subsidy were unable to collect it if their children or grandchildren were registered at different addresses. Starting on 1 June, children living separately from their parents could apply for emergency disaster support funds for their elderly parents who live alone.<sup>71</sup>

67. <https://www.hankyung.com/economy/article/202003044216i>

68. [https://biz.chosun.com/site/data/html\\_dir/2020/03/04/2020030400600.html?utm\\_source=bigkinds&utm\\_medium=original&utm\\_campaign=biz](https://biz.chosun.com/site/data/html_dir/2020/03/04/2020030400600.html?utm_source=bigkinds&utm_medium=original&utm_campaign=biz)

69. <https://news.joins.com/article/23869311>

70. [http://news.jtbc.joins.com/article/article.aspx?news\\_id=NB11949572](http://news.jtbc.joins.com/article/article.aspx?news_id=NB11949572)

71. <https://www.donga.com/news/article/all/20200601/101297212/1>

## 2. Response from non-government bodies

As an example, in early March, former public organizations in Busan Metropolitan City, including the Securities Depository of Korea, Housing Finance Corporation in Korea, Housing of Korea & Urban Guarantee Corporation, Asset Management Corporation of Korea, Southern Power Co. of Korea, Exchange in Korea and Technology Guarantee Fund of Korea, established an institutional support measure to overcome COVID-19. These organizations planned to donate \$ 8,446 worth of donations and sanitation kits each to prevent the spread of COVID-19. The donations are to be used to support vulnerable groups, underprivileged children, teenagers and isolated citizens through the Busan Community Chest of Korea, the Green Umbrella Children's Foundation, social welfare facilities, and local governments.<sup>72</sup>

As COVID-19 has spread, various types of non-governmental organizations have made efforts, using their own methods, to help victims of COVID-19. The Community Chest of Korea's special donation to help victims of COVID-19 was about \$ 24.7 million by 2 March.<sup>73</sup> The Hope Bridge National Disaster Relief Association, along with media organizations, is supporting the COVID-19 donation campaign with various relief goods, receiving

donations exceeding \$ 87.7 million by early July. The association provided a total of 9.7 million relief goods to living support centres, disaster-vulnerable groups and medical staff.<sup>74</sup>

On 20 July, the Korean Volunteer Federation launched a milk delivery project to prevent solitary deaths and to take care of the health of the elderly living alone because of social distancing caused by the spread of COVID-19. The Love Milk Delivery Project, conducted by the National Volunteer Federation, explains that, if milk deliveries are seen piling up outside the homes of elderly people living alone, it can quickly check if any accidents or emergencies have occurred and prevent unfortunate incidents such as someone dying alone. The Love Milk Delivery Project is being conducted on a trial basis with more than 1,000 households in 26 regions across the country and will be expanded further in the future. The Secretary-General of the National Volunteer Federation said, "Now is a time when we are keeping distance in our lives owing to the spread of COVID-19, so we will only leave it [milk] in front of the house because it is very risky to see elderly people and give it to them in person." The National

72. <https://www.hankyung.com/society/article/202003030878i>

73. <http://www.donga.com/news/article/all/20200303/99973302/1>

74. <https://news.joins.com/article/23826895>

Volunteer Federation is operating 26 offices nationwide to help the elderly who live alone and in poverty; they are carrying out love lunch box delivery projects, life improvement projects and self-reliance support projects to share their love and hope with vulnerable groups such as elderly and disabled people.<sup>75</sup>

Struggling with COVID-19 is all about survival. Protecting the people whose lives are at stake in the process is as important as the battle against the virus itself. There are starving and lonely elderly people who cannot eat a proper meal every day while the social welfare centres and the free lunch centres are locked down. However, free meal service centres have been organized to try to give them a warm meal by setting up partitions for them.<sup>76</sup>

“Corona blues” is a new phrase created during the continuing COVID-19 crisis. There are many people who are depressed about the fact that they should always wear masks, maintain social distancing and be careful about going to concert halls, playgrounds and restaurants. To help people regain vitality in their lives, the Korean Cultural Center Association is carrying out the “2020 Youth with Culture Project” for the elderly. “Youth with Culture” is divided into four categories: Adult Culture and Arts Education, Adult Culture and Arts Club, Youth Into Visiting Culture, and Adult Culture and Cooperation Project. They actively support the improvement of quality of life through the enjoyment of culture for the elderly.<sup>77</sup>

75. <https://www.donga.com/news/article/all/20200818/102532767/1>

76. [http://news.jtbc.joins.com/article/article.aspx?news\\_id=NB11955107](http://news.jtbc.joins.com/article/article.aspx?news_id=NB11955107)

77. <https://www.hankookilbo.com/News/Read/A2020102210290000518?did=NA>

### 3. Response from private sector

As the COVID-19 crisis continues, support for the elderly and other vulnerable groups is pouring in from different companies. There have been donations by enterprises such as Samsung Group, Hyundai Motor Group, POSCO, Asan Foundation, Hyundai Heavy Industries and Hanwha. On the other hand, daily necessities, such as face masks and hand sanitizers, are recommended to be purchased at local traditional markets to help small business owners.

For the first victims of COVID-19, Daegu Metropolitan City, Gyeongbuk Province, Korea Land and Housing

Corporation (LH) began the Save the Community Restaurant Project with the Community Chest of Korea and the Daegu Social Welfare Centre Association from 16 March.<sup>78</sup> The project is a social contribution activity that connects elderly households who live alone in LH's permanent complex with small restaurants around the building to deliver lunch boxes. LH selected 1,060 households out of nine permanent rental complexes in Daegu Metropolitan City that do not overlap with local government support projects and found 41 restaurants that could provide lunch boxes at LH's expense.

#### BOX 8. Korea Telecom's non-face-to-face dementia care service



Korea Telecom announced on 21 July 2020 that they would provide the "114 Safety Check Service" to 50 senior citizens with dementia, selected by the Office of Yongsan District of Seoul Metropolitan City, and would provide the GiGA Genie to another 50 senior citizens with dementia for one year. The 114 Safety Check Service is a service that frequently checks the call patterns of the telephones and mobile phones of elderly people who live alone. If there are any signs of abnormalities such as in the volume of calls, the service would send a text message to the family or the life manager in charge of the elderly person to check their safety. The GIGA Genie is used to improve cognitive awareness among senior citizens, with various dementia prevention games and voice recognition functions. A volunteer 50+ Health Coordinator dispatched from the 50 Plus Centre in downtown Seoul Metropolitan City visits elderly people's homes regularly and teaches them how to use the GiGA Genie and prevent dementia.

Source: <https://search.kt.com/?r=10&c=OLE000000&q=%EC%B9%98%EB%A7%A4&ch=USR000>  
[https://biz.chosun.com/site/data/html\\_dir/2020/07/21/2020072101177.html](https://biz.chosun.com/site/data/html_dir/2020/07/21/2020072101177.html)

78. [https://www.chosun.com/site/data/html\\_dir/2020/03/23/2020032303942.html?utm\\_source=bigkinds&utm\\_medium=original&utm\\_campaign=news](https://www.chosun.com/site/data/html_dir/2020/03/23/2020032303942.html?utm_source=bigkinds&utm_medium=original&utm_campaign=news)

As the main part of GS Caltex's Yeosu Plant's social contribution activities, employees of GS Caltex's Yeosu Plant have organized volunteer groups to share their love for local and sharing activities. In order to prevent the spread of COVID-19, executives and employees volunteered to provide preventive services to 32 multi-use facilities, including senior citizen centres, in Yeosu City.<sup>79</sup>

Korea Telecom (KT) has been carrying out non-face-to-face dementia care services with Yongsan District and Yongsan Detention and Security Centre since 20 July using AI training centres and ICT care solutions (Box 8). KT opened an AI training centre for non-face-to-face recognition and rehabilitation at Yongsan Detention Centre on 20 July as part of a project to create a senior ICT platform in Yongsan-gu District. Senior citizens and their families who use the centre can conduct training using ICT solutions without contacting work therapists. Senior citizens who visit the centre can use KT Real Cube, KT SuperVR, GiGA Genie, Kiosk (an unmanned ordering machine) and robot dolls. KT RealCube is a mixed reality solution that enables brain development, such as concentration, repair and problem-solving skills, by establishing responsive technologies and sensors that can simultaneously recognize motion in real-world space. The education centre operates intelligent space sterilization facilities, which allow senior citizens to

use the facilities with confidence. KTIT Supporters will also hold ICT education programmes that are linked to smart brain vitality education for senior citizens with dementia throughout the year. Detailed courses include augmented reality experience, Ozobot coding, hologram coding play and sticker coding.<sup>80</sup>

In reducing face-to-face contact in response to COVID-19, there is a concern about welfare blind spots occurring in communities. Therefore, the non-contact welfare services are implemented on a community basis. Here are some examples.

- A single point of access for all bank accounts is available in Incheon Metropolitan City.<sup>81</sup>
- Beef rib soup, soy milk, eggs, etc., with stickers on them that say "store carefully" are being bagged up for distribution.
- Two hundred nutrition kits, containing groceries and face masks, are delivered to elderly people who live alone in the area.
- The senior citizen centres and senior welfare centres could not provide meals on site because of COVID-19, so they started to deliver instead.
- Residents of Shinjeong-dong in Yangcheon District, Seoul Metropolitan City, decided to donate \$1,188 to the Seoul Southern Hospital, which is an exclusive COVID-19 treatment hospital; 130 residents donated \$9 each.<sup>82</sup>

79. <https://www.hankyung.com/society/article/2020102726951>

80. [https://biz.chosun.com/site/data/html\\_dir/2020/07/21/2020072101177.html](https://biz.chosun.com/site/data/html_dir/2020/07/21/2020072101177.html)

81. [https://imnews.imbc.com/replay/2020/nw1700/article/5769918\\_32510.html](https://imnews.imbc.com/replay/2020/nw1700/article/5769918_32510.html)

82. <http://www.donga.com/news/article/all/20200303/99973302/1>

## 4. Broader public response

With COVID-19 spreading nationwide, anxieties are rampant, but also the efforts of citizens to overcome the crisis have not stopped (Box 9).

According to the Daegu Metropolitan Government, which suffered the most from COVID-19 in the early stage, donations through each agency from

19 February to 1 March amounted to \$ 7.3 million and 1 million pieces of quarantine goods. An official from Daegu Metropolitan Government said, "The warmth sent from all over the world will never stop."<sup>83</sup>

About 10 volunteers from the Seosan Community Welfare Centre in Seosan City, Chungnam Province, made 500 masks over four days. On 6 March, the volunteer group delivered a first batch of 120 cotton masks to the elderly in the vulnerable class in the region and decided to continue their volunteer work to make cotton masks until the COVID-19 crisis is over. The volunteers are mainly women in their 60s or older. A volunteer called Park Hyang-sook, 65 years old, said, "We are making face masks with sewing machines in a General Social Welfare Centre as a talent donation" and "We made them reusable so only the filter needs to be changed."<sup>84</sup>

"Sorry that I couldn't be there by myself..." Son Chang-yong, 54 years old, said while on the phone to the Daegu Metropolitan City Council on 26 March, unable to hide his regret. After the call, \$ 2,742 was deposited into the Medical Association Sponsorship account. That

### BOX 9. "I'd like to help at least"

*On 21 March 2020, the broadcaster JTBC airs a film encouraging viewers to donate to COVID-19-related causes. In the middle of the night, a man with a cart is walking along the street. He is wearing a mask and holding a cane in one hand. The cart is full of boxes. He is on his way to Busan Bupyeong Police Station. At dawn, when everybody is asleep, this old man in his 70s is going to make a donation. He says he wants to give supplies to police officers suffering from the COVID-19 situation. In the cart there are four boxes of cup noodles, a box of soy milk and two bottles of crispy rice crust and candies. He also hands over an envelope with \$ 457 in cash and 80 face masks. The police officers refuse it, but the old man goes away with an empty cart. The police plan to donate these items back to the Jung District Office in Busan Metropolitan City and they will try to return the cash to the old man.*

Source: [http://news.jtbc.joins.com/article/article.aspx?news\\_id=NB11941292](http://news.jtbc.joins.com/article/article.aspx?news_id=NB11941292)

83. <https://news.joins.com/article/olink/23313602>

84. <https://news.joins.com/article/23911771?doc=joongang-article-recommend>

**BOX 10. Struggling with the coronavirus after Hansen's disease**

*On 5 March 2020, the Dong-A Ilbo featured stories about overcoming COVID-19. The dressing room on the first floor of Keimyung University's Dongsan Hospital in Daegu Metropolitan City at 7.30 a.m. on 5 March: Lee Ji-man, 32 years old, a nurse at Sorokdo National Hospital, takes off his protective clothing after taking care of patients with COVID-19 overnight in a ward on the 7th floor. He started his medical service at Dongsan Hospital on 23 February and hence became accustomed to wearing protective clothing, resulting in a reduction of about 5 minutes in the time taken to get dressed. The time he takes to put on protective clothing is still 15 minutes. He says, "I'm nervous and burdened just by wearing protective clothing. It takes four hours to treat patients during eight hours of work and four hours of rest, but I am still on standby during the break." Lee volunteered to treat Hansen's disease at Sorokdo National Hospital, and he volunteered again for medical services for patients with COVID-19 in Daegu Metropolitan City. Lee says, "I volunteered because I thought it was something someone should do. I wanted to fulfil my duty as a civil servant at a time when the national situation is not good." He also says, "COVID-19 is a new pandemic, so there is nervousness and fear at the same time." However, caring for patients by giving lots of encouragement really helps. Lee says, "I came to Dongsan Hospital because they needed a nurse. I'm encouraged by frequent calls from my superior and my teacher to cheer me up."*

*Marianne Sturger, 86 years old, and Margarita Pissarek, 85 years old, who took care of people with Hansen's disease in Sorok Island, Goheunggun county, Jeonnam Province, have said that "the most feared enemy of infectious diseases is 'fear'". The two nurses graduated from Innsbruck Nursing School in Austria and arrived in Korea in 1962 and 1966, respectively, to serve people with Hansen's disease in Sorok Island for more than 40 years. Their junior colleagues, seven nurses at Sorokdo National Hospital, are drawing attention as they are doing medical volunteer work at the coronavirus treatment and quarantine site.*

Source: <http://www.donga.com/news/article/all/20200305/100026958/1>

was most of Son's income for the previous month. Son is a doctor, and he tried to provide medical services in Daegu Metropolitan City as the number of COVID-19-infected patients increased by hundreds every day (Box 10). However, he was unable to participate owing to heart disease, so he sent money to the doctors' association instead. "It's hard to stand by and see the hardships of my fellow doctors. I want to pay for the

purchase of masks or protective equipment," said Son.<sup>85</sup>

After anonymous donations were made during a live TV broadcast, lots of donations began pouring in to help overcome COVID-19. A donor said, "I'm a third-degree handicapped person, working across the street. I'd like to share some face masks that I received from my company. I had thought donations were

85. <http://www.donga.com/news/article/all/20200303/99973302/1>

only for rich people, but the news from the television encouraged me to be part of the help. I'm sorry for the small amount."<sup>86</sup> There are men and women of all ages, occupations and income brackets joining in and donating. Here are other examples. A disabled person who left 11 masks and some letters in front of the Busan signal police station and then disappeared touched our hearts. A man in his 80s in Seosan City, Chungnam Province, left a plastic bag containing \$ 895 in notes and coins, at City Hall and said, "Please deliver it to Daegu." A 70-year-old woman visited the Yeonsu-dong Administrative Welfare Center in Chungbuk Province and left an envelope containing \$ 1,828 in cash at the centre. An anonymous donator who left \$ 5,484 cash in the Gyeongnam Community Chest of Korea in Changwon City, Gyeongnam Province, wrote

a handwritten letter, saying, "Sorry that the amount. Pray that those who are in anxiety and pain will return to their daily lives as soon as possible. I love you." In Changnyeong City, Gyeongnam Province, a woman in her 60s offered \$ 9,140 in cash wrapped in a newspaper. An elderly woman at a street stall donated \$ 914 in cash and 39 masks that she saved to give to those in need. A young donor brought piggy banks to the police station. As the COVID-19 crisis continued, the nuns of the Incheon Metropolitan Government of the Korean Society for the Sisters of the People's Association decided to make 5,000 masks by hand and are running their sewing machines day and night.<sup>86</sup> A number of Korean celebrities have also donated, including singer BTS Suga, movie director Bong Joon-ho and soccer player Son Heung-min.<sup>87</sup>

86. <https://www.hankyung.com/society/article/202003232091i>

87. <https://news.joins.com/article/23826895>

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## Authors



### LEE Samsik, Professor

Director, Institute of Aging Society, Hanyang University  
 Department of Policy, College of Policy Science, Hanyang University  
 Department of Active Aging Industry, Graduate School, Hanyang University  
 Chairman of the Generational Sympathy Subcommittee and  
 Commissioner, Policy Steering Committee, Presidential Committee on Ageing Society and Population Policy  
 Advisory Committee Member, National Assembly Forum on Low Birth and Population Cliffs  
 Commissioner, Mid- to Long-Term Tax Policy Review Committee, Ministry of Strategy and Finance

### OM Ae Son, Professor

Dean, Department of Active Aging Industry, Graduate School, Hanyang University  
 Department of Food and Nutrition, College of Human Ecology, Hanyang University  
 Deputy Director, Institute of Aging Society, Hanyang University  
 Head Director, Institute of Local and Multicultural Family Support  
 Commissioner for Food Safety Policy, Office for Government Policy Coordination  
 Non-standing Director, The Food Industry Promotional Agency of Korea  
 Advisory Member, Food and Drug Technical Advisory Committee, Ministry of Food and Drug Safety



### KIM Sung Min, Professor

Department of Active Aging Industry, Graduate School, Hanyang University  
 Major in Human-Tech Convergence Department of Physical Education, Hanyang University  
 Institute of Aging Society, Hanyang University  
 Department of Physical Education, College of Art and Physical Education, Hanyang University  
 Director for Healthy Aging, Hanyang University  
 Director of Center for Artificial Intelligence Muscle, Hanyang University  
 Education-Research Innovation Program for Human-Centered Technology

### LEE Nanum, Graduate Student

Department of Media and Communication, College of Social Sciences, Hanyang University





CONTACT POINTS

**Institute of Aging Society  
Hanyang University**

222, Wangsimni-ro, Seongdong-gu, Seoul, 04763  
Republic of Korea

**Tel.** 82-2-2220-2795

**E-mail.** [lss2323@hanyang.ac.kr](mailto:lss2323@hanyang.ac.kr)

[aesonom@hanyang.ac.kr](mailto:aesonom@hanyang.ac.kr)

[minarthur@hanyang.ac.kr](mailto:minarthur@hanyang.ac.kr)