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COVID-19 PANDEMIC



**EXPERIENCE OF
SOUTH KOREA**

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Preface

Since the start of the COVID-19 outbreak, the world has had to deal with the crisis. A number of countries and their respective governments have tackled the pandemic differently to each other. The objective of this series of analyses is to present and discuss the actions undertaken in various countries, with each case discussed individually. We hope our presentation of all the literature and materials reviewed will certainly facilitate easy and ready reference, allowing for future contributors to add to the research. Many literature reviews written in Korean language have remained out of our reach. Although, we have tried to rigorously verify the authenticity and completeness of the information presented in literature and materials cited in this study but, we apologize to our readers for any inconvenience that may result from any error in the publications.

Effort has been made to present all the information in a chronological manner with the exception of reordering information to fit the narrative of the study as intended. We sincerely hope that much more additional material could come to light enabling us to substantially improve on this study.

We express our earnest gratitude and acknowledgement to all who translated and published works cited in this study in different forms earlier. Finally, we hope our effort will be well rewarded by the warm and enthusiastic response of our esteemed readers and wish that our study extends an invitation to more academic contributions on COVID-19 in the future.

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Covid-19 Pandemic: Experience of South Korea

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Abstract

The COVID-19 outbreak since end of last year has disrupted global health and economy and presented substantial challenges to control this highly contagious disease, resulting in deaths in tens of thousands all over the world.

South Korea has been quite an exception to the fate of the rest of the world, emerging successful in its containment. In this study, we have reviewed secondary literature and materials and outlined all the measures and policies the Korean government has undertaken during the pandemic which has proven to be instrumental in its mission to “flatten the curve”. We discuss how the country prioritized the production of testing kits over issuing mandatory national lockdowns, unlike many other nations, and how the Govt. developed and allocated its USD 13.7 billion financial scheme and support packages to provide sustenance for its people amidst global crisis. In conclusion, we draw lessons that can be learned from South Korea’s valiant effort in curbing the spread of Coronavirus and can be emulated by other nations to fight this global pandemic.

Introduction and Background

During the second week of December 2019, the novel Coronavirus (nCoV) emerged in the Huanan Seafood Market, where livestock animals are traded, in Wuhan State, capital city of Hubei Province in China. The Coronavirus, being what is known as a zoonotic disease, latched on to people from exotic animal and spread rapidly through crowded places. As people travelled overseas from China, the disease crossed international borders and in a matter of weeks started showing telltale signs of a global pandemic. South Korea, having had bitter experiences from the past of SARS (2003) and MERS (2013) outbreak, could sense a possible outbreak in the horizon when the first news of infected case of Wuhan arrived at its shores. In this study, we have reviewed secondary literature and materials to give us a picture of the set of actions that South Korea enforced in curbing the spread of this infectious disease despite not issuing a mandatory city lockdown as most other nations have done. We try to address how the Korean government was able to tackle the situation without overwhelming the capacity of its healthcare facilities and ensuring there is no shortage of precautionary kits. The study also looks at how the Korean Government had previously developed legislations during pandemics of the past which helped them deal with COVID-19. We assess financial schemes and packages that the Korean government has announced at the wake of the COVID-19 outbreak to support all relevant stakeholders impacted by global crisis. Lastly, we compare statistics such as mortality rate and testing capacity of that with South Korea with that of other global leaders.

Amidst the global COVID-19 pandemic, South Korea is being recognized as emerging victorious with having taken effective measures and making steadfast decisions, as a result of which the country was able to restrict its death rate down at 0.97 percent compared to 7.94 percent in Italy, 3.98 percent in mainland China and Hong Kong, and 1.68 percent in the United States.³ The study discusses how privatized companies in South Korea shifted their priority to assist the government by ramping up its production of testing kits from producing 100,000 tests per week to 1 million tests⁴, allowing the country to screen approximately 20,000 people a day and quarantine those who test positive immediately.⁵

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³ Aljazeera (21 March 2020), Testing times: Why South Korea's COVID-19 strategy is working.

⁴ Forbes (5 April 2020), How One Firm's Covid-19 Tests Help Control The Virus In South Korea.

⁵ Aljazeera (21 March 2020), Testing times: Why South Korea's COVID-19 strategy is working.

The study looks into how South Korea’s past experiences – SARS (2003) and MERS (2013) – had trained citizens to take precautionary measures from the start so citywide lockdowns were not necessary. The study takes a closer look at the spike in cases that occurred in South Korea, initiating from an infected case spreading the infection in church congregation on two separate occasions in the city of Daegu, responsible for 85 percent of all confirmed cases in the country⁶, and how South Korea responded to it through accelerated testing program, banning of mask exports, and other measures. Lastly, the study outlines policies issued by the Korean government and breaks down the allocation of the USD 13.7 billion stimulus package announced by the Korean government to support SMEs and relevant stakeholders to help them recover from the fallout of the pandemic.

Research Questions

- i. How did South Korea keep its death rate considerably low at 0.9 percent?
- ii. Why did COVID-19 cases suddenly spiked in South Korea and how did the Korean Government mitigate the impact of the “super spreader”?
- iii. How past experiences of SARS (2003) and MERS (2013) helped South Korea face the COVID-19 pandemic?
- iv. How were the large-scale production and approval of Testing-kits possible in South Korea?
- v. How did South Korea track the spread of the virus and treat people without overwhelming healthcare capacity?
- vi. How did the Korean government curb the spread without imposing mandatory national lockdowns?
- vii. What policies were issued by Korean Government as a response for COVID-19?
- viii. How did the Korean government develop and allocate their Financial Schemes and Support Packages?
- ix. What are the recommendations and lessons learned from South Korea’s effective and successful measures and policies at overcoming COVID-19?

Methodology

The study systematically reviewed literature and government policies to construct the entire timeline of events as they unfolded and outlined the measures and policies the Government of Korea issued in response to COVID-19. Furthermore, the study analyzed statistical data presented in literature to draw comparison with respective figures of other nations to assess the level of success and effectiveness of the measures particularly for South Korea. We reviewed literature to understand the chain of events through detailed contextual analysis and their interlinked relationships and relied on a variety of sources to investigate the unique situation in South Korea. Finally, we try to shed light on why the measures were proven to be effective under the given circumstances and how did South Korea respond differently than other nations.

⁶ Denis McClean (25 March, 2020), How South Korea is suppressing COVID-19, United Nations Office for Disaster Risk Reduction.

Findings and Discussions

South Korea: Country and Healthcare Overview

Since the partition in 1948, South Korea has developed into one of Asia's most affluent countries. The economy of South Korea is 4th largest in Asia, only behind China, Japan, and India. The country's technological rise is attributable to its prolific education system. The South Korean healthcare system is administered by the Ministry of Health and Welfare and is free of cost to all citizens at the point of delivery. The system is funded by a compulsory National Health Insurance Scheme that covers 97 percent of the population. The access to universal healthcare is enjoyed by both local people and foreign nationals residing in South Korea. According to World Health Organization (WHO), the life expectancy at birth for male and female in South Korea was 80 and 86 respectively in 2016. Probability of dying under five per 1000 births was 3 in 2018.⁷ The current life expectancy for South Korea in 2020 is 83.06 years, a 0.18 percent increase from 2019⁸ and was ranked at 9th all over the world according to WHO data published in 2018.⁹

COVID-19 First Response in South Korea

The first case of coronavirus in South Korea was reported by the National IHR Focal Point (NFP) on 20 January 2020. The patient was a Chinese woman who arrived at the South Korean airport with a fever.¹⁰ From 19 January to 18 February, South Korea had observed a total of 30 cases with no fatality. However, on the 18th February, the number suddenly spiked from the time it recorded its 31st case which is regarded as a super-spreader. In the next 10 days from the 31st case, the country had more than 2,300 cases of coronavirus infection. The cause for the massive spread is largely attributable to a religious gathering that took place in the city of Daegu where the patient from the 31st case participated church services in two separate occasions where the infection spread to hundreds of other people who attended the church congregation. Although authorities were initially taken aback by the rapidity in the number of infected cases, they were adequately prepared to tackle the situation in case of super-spreaders exacerbating the problem. All government ministries immediately worked in coordination and other provinces opened up beds in their hospitals when one region ran out of hospital beds. Regions in South Korea also shared doctors to come to different regions to assist as was required.¹¹

Large-scale production of Testing Kits

In the initial days of the outbreak, on January 27, South Korean health officials met with 20 medical and pharmaceutical companies to discuss about the development of new test kits after four confirmed cases of COVID-19. The tough regulations on approval of testing kits had to be loosened so that hospitals and labs could be allowed to perform their own coronavirus tests on their patients.¹² When the first news of coronavirus infections in Wuhan first reached South Korea, Seoul-based biotech firm, Seegene, already started anticipating a very probable outbreak. The company started producing diagnostic kit for the

⁷ Countries: Republic of Korea, website: World Health Organization. Cited from <https://www.who.int/countries/kor/en/>

⁸ United Nations - World Population Prospects. Cited from Macrotrends website.

⁹ World Life Expectancy. Cited from <https://www.worldlifeexpectancy.com/>

¹⁰ Praveen Duddu (2 April 2020), Coronavirus in South Korea: COVID-19 outbreak, measures and impact, Pharmaceutical Technology

¹¹ Sean Fleming (31 March 2020), South Korea's Foreign Minister explains how the country contained COVID-19, World Economic Forum

¹² Matt Berger (March 29, 2020), How South Korea Successfully Battled COVID-19 While the U.S. Didn't, Healthline.

COVID-19 while most other countries were still oblivious about the severity of the situation. In two weeks, the company developed its test kits and when the first case confirmed case first arrived at the shore of South Korea on January 27, the company was ready to provide its test kits to be reviewed by the Korea Centers for Disease Control and Prevention (KCDC). On February 12, the kits were approved for use. The approval of this nature generally take months but the approval in this case took place quickly. While the company was producing 100,000 tests per week, they ramped up their production to 1 million tests which not only provides for South Korea but also 40 other countries. This significantly helped the country achieve an amazing feat of recording less than 10,000 cases of infection in a country of 51 million people.¹³ Likewise, many Korean companies acted quickly and produced testing kits enough to screen approximately 20,000 people a day. The testing kits were made available for free for all citizens and whenever a person was identified carrying the disease, they were immediately put into quarantine.¹⁴ Just after nine days from the first positive case in South Korea, the country established a call center to update the public and collect case data. At the same time, the Korea Occupational Safety and Health Agency started supplying more than 700,000 facemasks to vulnerable workplaces.¹⁵ Diagnostic kits combined with drive-through and walk-through test centers were two major factors in South Korea’s success story. South Korea set up more than 70 drive-through facilities and more than 600 testing facilities nationwide.¹⁶ Previously, 100 labs continued working round the clock across South Korea and provided daily testing capacity of 20,000.¹⁷ Since 24 January, diagnostic tests for novel coronavirus were made available at KCDC, along with 17 environmental research institutes and a number of private clinics and medical centers since February.¹⁸

“Flattened the Curve” without National Lockdowns

Surprisingly, South Korea has been able to pull off this amazing feat without locking down entire cities as many other countries have. The success is largely contributed by an expansive and well-organized testing program that the country developed prior to the outbreak. Due to these facilities, the country tested more than 270,000 people and trace and quarantine their contacts which is more than any other country in the world. The impressive act of testing at such a large scale translates to 5200 tests per million inhabitants. In comparison, the United States carried out 74 tests per million inhabitants. This provides a valuable lesson for other countries to emulate if they are to look for a solution - diagnostic capacity and

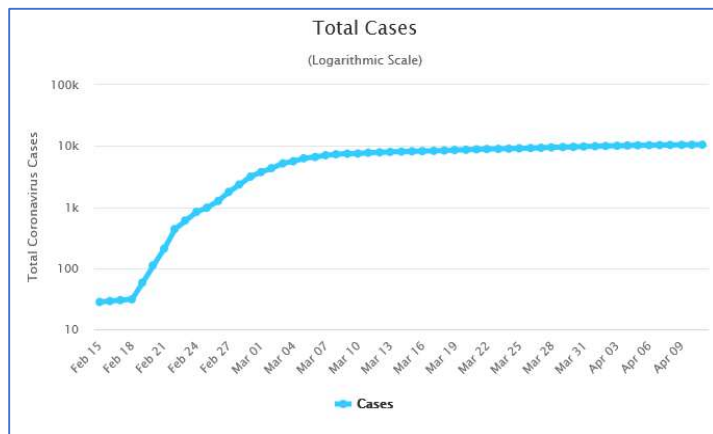


Figure 1: Total Coronavirus Cases in South Korea [Source Worldometer. <https://www.worldometers.info/coronavirus/country/south-korea/>]

¹³ Forbes (5 April 2020), How One Firm's Covid-19 Tests Help Control The Virus In South Korea.

¹⁴ Aljazeera (21 March 2020), Testing times: Why South Korea's COVID-19 strategy is working.

¹⁵ Victor Cha (10 April 2020), South Korea Offers a Lesson in Best Practices, Foreign Affairs.

¹⁶ Victor Cha (10 April 2020), South Korea Offers a Lesson in Best Practices, Foreign Affairs.

¹⁷ Denis McClean (25 March, 2020), How South Korea is suppressing COVID-19, United Nations Office for Disaster Risk Reduction.

¹⁸ Praveen Duddu (2 April 2020), Coronavirus in South Korea: COVID-19 outbreak, measures and impact, Pharmaceutical Technology

contact tracing at scale is key to epidemic control.¹⁹ In addition to testing kits, the government obtained personal information of every citizen who tested positive for COVID-19 like mobile phone records, credit card receipts and other private data to track the spread of the virus. The government started their operation from early February and made the data available to the public which created an atmosphere of awareness. The results of these effective measures is quite clear - the COVID-19 death rate is 0.97 percent in South Korea, compared to 7.94 percent in Italy, 3.98 percent in mainland China and Hong Kong, and 1.68 percent in the United States.²⁰ As of 10th April 2020, South Korea has had 10450 total confirmed cases of which there has been 208 total deaths. In comparison, as of 10th April 2020, Spain has had 15238 deaths, Italy has had 18281 deaths, France has had 12192 deaths and US has had 14665 deaths.²¹ As of 10th April 2020, of the country's 10,450 confirmed cases, more than 7,000 have gone on to make a recovery.²²

Past Experience with SARS (2003) and MERS (2013) outbreak

The country found itself in a unique position because they were already acquainted with the disastrous consequences brought about by outbreaks and hence, learned the importance of preparedness. In 2015 when the country was hit by Middle East respiratory syndrome (MERS), 36 South Koreans died and the outbreak dented the economy immensely. Since the unpleasant experience of MERS, the country fortified its hospital infection prevention and control facilities and introduced legislation that allowed the government authority to collect private information of citizens who tested positive to infectious diseases. Furthermore, the information is then disseminated in social media so that the people of the nation can effectively avoid crossed paths with an infected person.²³

The country was not unfamiliar with the potential risks of outbreaks which proved to be a big advantage. Preceding the 2015 MERS outbreak, South Korea experienced a grueling 2003 SARS epidemic. As a result of the scar left behind by the epidemic, the government positively assessed the lessons learned from their experience and mobilized all existing governmental units in the ministries of health welfare and foreign affairs, regional municipalities and the president's office. This allowed the country to effectively control the nation's mortality rate by not introducing travel bans but rather through widespread rigorous quarantine measures and testing. Furthermore, the country developed and introduced a central tracking app that publicly informed citizens of confirmed and known cases within 100 meters of their location. In order to incentive citizens to observe self-isolation further, there was a temporary provision of £313 (USD 390) a month to cover basic living expenses. This provided subsistence for those whose income to make livelihood were disrupted from the ministry of education's closure of schools. In addition, from 16 March, all people arriving at airports from overseas, including Koreans, were screened.²⁴

Large Religious Gathering – Breeding Ground for Infection Spread

One important lesson that other countries can learn from the sudden spike in cases in South Korea is the role played by large religious gatherings on the spread of infectious disease. The outbreak in South Korea

¹⁹ Dennis Normile (17 March 2020), Coronavirus cases have dropped sharply in South Korea. What's the secret to its success?, Science Magazine.

²⁰ Aljazeera (21 March 2020), Testing times: Why South Korea's COVID-19 strategy is working.

²¹ Coronavirus disease 2019 (COVID-19) Situation Report – 81 (10 April 2020), World Health Organization.

²² Riyaz ul Khaliq (10 April 2020), COVID-19 reappears in recovered South Korean patients, Anadolu Agency.

²³ Dennis Normile (17 March 2020), Coronavirus cases have dropped sharply in South Korea. What's the secret to its success?, Science Magazine.

²⁴ Alexis Dudden and Andrew Marks (20 March 2020), South Korea took rapid, intrusive measures against Covid-19 – and they worked, The Guardian.

was primarily triggered by religious activities that took place by a religious organization in the city of Daegu. Till date, 85 percent of confirmed cases can be traced to Daegu. Large social gatherings like church congregation is breeding ground for infectious diseases to spread across hundreds of people who attend such events. Prior to the event that took place in Daegu, the number of new infections was relatively low, but then the curve suddenly peaked.²⁵ Therefore, it is very important to acknowledge that infectious diseases as such is highly unpredictable in nature and social distancing must be observed unconditionally. Large religious gatherings must be avoided at all costs if we are to learn lessons from South Korea.

Government health service policies for responding COVID-19

The valiant effort of South Korea can be summarized into three words – trace, test and treat. The country prioritized testing patients for coronavirus infection and ramping production of testing kits over imposing mandatory citywide lockdowns. The Government of South Korea primarily adopted four main policies to prevent the spread of COVID-19. First, the government was adamant about the openness and transparency in sharing updated information on new infections with the collaboration of KCDC with all stakeholders involved, including the media, on when and where the infections were discovered and how they were being investigated. This instilled a sense of trust among citizens as they sought solace in the effective measures that were being taken. From their experiences with the 2015 MERS, the public already knew about the necessary precautions that had to be observed to avoid the spreading of the virus. Second, containment was initiated from the time the first news of Coronavirus in China arrived in South Korea. The government actively pursued all suspected cases and traced all of them. To compliment it, social distancing campaign was introduced following the major outbreak in Daegu. The third policy is attributed to the development of efficient and effective treatment system as a result of experience of past outbreaks of similar nature. They developed, what is known as a triage system, to treat patients according to the degree of urgency of illness. Five isolation hospitals were established to take care of 19 percent of cases that were designated as critical and severed, while moderate cases were taken care of by a network of public community hospitals. Similar to China, South Korea also repurposed their hotels, gyms and residential centers to accommodate more beds for patients. Finally, the fourth policy promoted wide scale of screening and fast tracking of suspected cases. The policy was accelerated by prior initiatives that have been taken by South Korean companies in ramping up their production of emergency diagnostic kits and significantly increasing their weekly diagnostic capability.²⁶

The government also imposed ban on exports on masks and other items to ensure that the country doesn't suffer from shortage.²⁷ Although the country was initially suffering from mask shortage, on March 5, the government purchased 80 percent of the masks produced domestically and prioritized hospitals for distribution and then created a price control and ration system. To prevent hoarding, citizens were allowed to purchase masks only on designated days based on the last digits of their birth years. Due to the Korean government's control over distribution, there was a wide supply of masks across all states whereas in other nations where decentralized approach was made failed.²⁸

²⁵ Denis McClean (25 March, 2020), How South Korea is suppressing COVID-19, United Nations Office for Disaster Risk Reduction.

²⁶ Denis McClean (25 March, 2020), How South Korea is suppressing COVID-19, United Nations Office for Disaster Risk Reduction.

²⁷ Praveen Duddu (2 April 2020), Coronavirus in South Korea: COVID-19 outbreak, measures and impact, Pharmaceutical Technology

²⁸ Victor Cha (10 April 2020), South Korea Offers a Lesson in Best Practices, Foreign Affairs.

Although the South Korean government was vigilant from the coronavirus outbreak in Wuhan, it could not stop the virus from entering the country due to an influx of Chinese people entering the country on the eve of Lunar New Year. On 4 March, the government passed new medical laws which allowed authority to prosecute coronavirus-suspected people who refused to cooperate to get tested for nCov. This law additionally allowed the nation to bar entry of people to the country who were confirmed or suspected to have contracted the disease. From 12 February, South Korea became more selective of people from Mainland China, Hong Kong and Macao from entering the country after anticipating community spread. The government also recommended employers to issue two weeks of leave of absence or work from home to employees returning from China. Moreover, the government imposed a rental fee reduction by half to those businesses that were operating out of airports and duty-free retailers to support them during the pandemic.²⁹

Economic stimulus package to tackle the financial difficulties

On March 4th, South Korea announced a 11.7 trillion Korean Won (KRW) (USD 13.7 billion) stimulus package to provide funding to address healthcare costs, provide support to small and medium enterprises impacted by the COVID-19 crisis, and help make up for expected shortfalls in tax revenues.³⁰ On March 31st, The Korean Government updated a comprehensive document outlining tax relief, fiscal, financial and administrative support detailed by size of companies and sectors on its economic measures against Covid-19:

Support for Employers and Employees - On March 3rd, the Korean Ministry of Labor and Employment (MOEL) announced guidelines as support measures such as financial assistance to quarantined employees, or the implementation of flexible hours and home office systems: 1) Employers' support for paid leave if an employee is hospitalized and quarantined by the health authority: daily salary per individual, max. of 130,000 KRW per day, application to National Pension Service branch; 2) Employees' support for living expenses if hospitalized and quarantined employee does not benefit from paid leave: emergency welfare assistance of 1.23 million KRW (USD 1,011) per 4-member household; 3) In case of shutdown decided by a business owner, the employer shall pay 70 percent of the average wage. Employees are subject to the provision of 'allowances' under the Labor Standards Act. However, within the Act, Article 46 states that at least 70 percent of the wage must be compensated if the reasons for which the workplace is closed is attributable to the employer. Therefore, it is a violation of the law to have a company (i.e. employer) oblige unpaid leave on their employees. Currently, the Government is asking companies to pay the allowance for suspension of work to its workers, and recommends companies to apply for Employment Maintenance Fund (EMF). The EMF provides limited funding for companies who had to decrease production due to economic downturn. It covers between two-third and half of the allowance paid to employees.³¹

Assistance to priority companies that use a flexible working system (commuting based on time lags, home office, telecommuting): 2.6 million KRW (USD 2,134) per person per year if the system is used once or twice a week, and 5.2 million KRW (USD 4,269) per person per year if the system is used 3 times a week.

²⁹ Praveen Duddu (2 April 2020), Coronavirus in South Korea: COVID-19 outbreak, measures and impact, Pharmaceutical Technology

³⁰ Troy Stangarone (19 March, 2020), South Korea Braces for Global Recession, The Diplomat.

³¹ FKCCI (6 April, 2020), COVID 19 - Advisory Korea

Special Fiscal Measures - The National Tax Service announced an extend of the deadline to report and pay corporate tax for companies suffering from new coronavirus infection and an early VAT refunds. Such companies have to submit a request to their NTS Office.

Financing of the Government Support Scheme - 11.7 trillion KRW (USD 9.6 billion) extra budget to minimize economic fallout has been submitted to the National Assembly on March 5th. Distribution of the budget are as follows - 3.2 trillion KRW (USD 2.6 billion) to balance tax losses, 3.0 trillion KRW (USD 2.5 billion) to secure labor market and boost local consumption (vouchers for low-income families & part refunds on energy-efficient products), 2.4 trillion KRW (USD 2 billion) (to support Small and Medium Enterprises (SMEs) affected by the breakout (mainly to finance low interest rate loan through Industrial Bank of Korea), 2.3 trillion KRW (USD 1.9 billion) to upgrade the quarantine system and medical capacity and 0.8 trillion for regional economy recovery.³²

Enterprises: Supportive Measures - President Moon Jae-in publicly announced a financial package worth 50 trillion KRW (USD 39 billion) aimed to provide sustenance for small businesses in an “emergency economic council” session. The financial support program centers around much needed support to small and medium-sized firms and people with low credit ratings. On March 24, the amount was doubled to 100 trillion KRW (USD 82 billion). Earlier on March 23rd, the government of Daegu, the southeastern city announced emergency financial assistance of about 660 billion KRW (USD 517 million) to help about 640,000 of the city’s 1.03 million households, to hand out varying amounts of financial support to low-income households, small business owners and self-employed people, beginning April 16.³³ Jeonju City in North Jeolla Province has decided to provide cash relief to people whose livelihoods have been strained by the new coronavirus, the first among municipalities. During a session at the Jeonju City Council, Tuesday, Mayor Kim Seung-su discussed plans to provide 500,000 KRW (USD 417) each to the 50,000 unemployed people and non-regular workers struggling due to COVID-19. The city government allocated 54.3 billion KRW (USD 44.5 million) in an emergency budget and asked the council to approve it.³⁴

Expansion of Special Financial Support - South Korean Government announced over 20 trillion KRW (USD 16.4 billion) Support Package to respond to COVID-19 outbreak as of February 28, 2020. The allocation of the overall budget are as follows: 1) Support proper disease control and prevention programs; 2) Provide as many as 7 million masks for people in Daegu City and Cheongdo Country; 3) Promote the lowering of commercial rents by providing landlords with a 50 percent income tax break for the discount in the first half; 4) Provide a VAT break for businesses earning 60 million KRW (nearly USD 50,000) or less a year; 5) Help small merchants and SMEs with their business operations; 6) Provide employment support for businesses hit hard, such as tourism; 7) Increase the issuance of local gift certificates in 2020 by 3.5 trillion KRW (USD 2.8 billion) to help local economics and traditional markets; 8) Give parent employees up to 5 days of childcare leave along with the pay of 50,000 KRW (USD 41) per day; 9) Promote consumption: Give a 70 percent individual consumption tax cut for car purchases, and a 10 percent refund for the purchases of high energy-efficient home appliances; 10) Promote consumption by issuing discount coupons to be used for purchasing cultural events and farm products, as well as for tourism expenses and paychecks.³⁵

³² FKCCI (6 April, 2020), COVID 19 - Advisory Korea

³³ Seokmin Lee (25 March, 2020), Fighting COVID 19 – Legal Powers and Risks: South Korea, Verfassungsblog on Matters Constitutional.

³⁴ Do Je-hae (11 March, 2020), Virus raises debate over basic income, The Korea Times.

³⁵ Government support schemes for COVID-19 (as of 7 April, 2020), TMF Group.

Supplementary budget for small merchants and SMEs and VAT Break - South Korea is helping small merchants and small and medium-sized businesses with an aid worth 2.4 trillion KRW (approx. USD 2 billion) of emergency support through loans and wage support. Furthermore, the government is providing a VAT break for businesses with revenues of 60 million KRW (approx. USD 50,000) or less per year.³⁶

Summary Findings

- South Korea curbed the spread of COVID-19 despite “super spreader” appearing in the 31st case.
- Provinces opened up their beds and hospitals to other regions and shared doctors.
- Tough regulation on testing-kits were loosened to be approved.
- Production of testing kits ramped up production from 100,000 tests per week to 1 million tests and screened approximately 20,000 people a day.
- South Korea tested more than 270,000 people and recorded less than 10,000 cases of infection.
- The COVID-19 death rate is 0.97 percent in South Korea, compared to 7.94 percent in Italy, 3.98 percent in mainland China and Hong Kong, and 1.68 percent in the United States.
- From MERS (2013) outbreak, Korean Government introduced legislation to collect private information of citizens who tested positive to infectious diseases.
- Governmental units of ministries were mobilized to carry out rigorous quarantine measures.
- South Korea developed an app that informed citizens of known cases within 100 meters of their location.
- Large gatherings from religious activities are a breeding ground for the spread of COVID-19.
- Korean government was transparent about known cases with the public and social media.
- They treated patients according to the degree of urgency of illness to avoid exceeding the capacity of healthcare system by developing a triage system.
- Korean Government imposed ban on exporting masks and bared entry of foreigners confirmed or suspected of being contracted with COVID-19.
- South Korea announced a 11.7 trillion KRW (USD 13.7 billion) stimulus package to support people and business during the pandemic.
- Korean Government reduced rental fee by half to support businesses that were affected from airport shutdowns.
- Korean Government announced employees to be paid 70 percent of their wages and granted paid leave.
- Korean Government promised to cover between two-thirds and half of the allowance paid to employees to support companies.
- Payment deadline for corporate tax to be paid was extended.
- Commercial rents were lowered by providing landlords with a 50 percent income tax break.
- Businesses were given VAT break according to their income.
- Discount coupons were introduced to promote consumption.
- Korean Government announced temporary provision of £313 (USD 390) a month to cover basic living expenses.

Conclusion

South Korea was quick to realize that trust played an important element of social capital and therefore mayors and governors of major cities, under the instruction of the government, provided frequent briefings on new developments on the epidemic. The public, therefore, were more compliant of government orders in the absence of major restrictive measures. Consumers didn't stockpile masks or sanitizers since there were no shortage, ensured by the Government. Although people were initially skeptical of the intrusive measures taken by the government to collect private data to track suspected

³⁶ Government support schemes for COVID-19 (as of 7 April, 2020), TMF Group.

cases, they permitted the Government vigilance when positive outcomes were evident. South Korea's triage health care system prioritized older patients with pre-existing conditions, who are more vulnerable to the disease, and thus capacities of healthcare facilities weren't overwhelmed.³⁷ The countries' effort to cast a wide net of testing was rewarded since they were able to trace infections and effectively stop widespread transmission altogether. Despite the perceived notion that United States is a global leader in healthcare facilities and services, the country reported 15 times more confirmed COVID-19 cases and deaths than South Korea despite having only about six times the population. This epitomizes South Korea's herculean efforts and measures to curb the spread of this highly contagious disease. Now that the country has reduced the rate of new daily cases to one-tenth of its peak, it is considering opening schools in the following weeks while most other countries have to wait out at least another month or more. Other than schools, they are also preparing for churches, gyms, and entertainment venues to possibly reopen from the following week.³⁸ All of these precautionary measures and financial schemes proved to be effective in keeping the disease at bay and are the contributing factors to the success story of South Korea in its battle against COVID-19.

Abbreviation

COVID-19 – Coronavirus disease 2019	NFP – National IHR Focal Point
EMF - Employment Maintenance Fund	NTS - National Tax Service
KCDC - Korea Centers for Disease Control	SARS - Severe Acute Respiratory Syndrome
KRW - Korean Won	SMEs - Small and Medium Enterprises
MERS - Middle East Respiratory Syndrome	USD – United States Dollar
MOEL - Ministry of Labor and Employment	VAT -Value Added Tax
nCov – Novel Coronavirus	WHO - World Health Organization

Authors' contributions

The idea for the study was conceived by DevResonance Ltd and formed a team for this study. The study team responsible for developing the theory, reviewing literature and other materials, investigating the integrity of the information and supervising the findings of this work. Study team discussed the results and contributed to the final manuscript.

Competing Interest

DevResonance Ltd. and its team has no significant competing financial, professional or personal interests that might have influenced the performance of presentation of the work described in this manuscript.

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³⁷ Soonam Kwon (31 March, 2020), COVID-19: LESSONS FROM SOUTH KOREA, Health Systems Global.

³⁸ Matt Berger (March 29, 2020), How South Korea Successfully Battled COVID-19 While the U.S. Didn't, Healthline.

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