Policy Analysis of Handling COVID-19: Experience China, South Korea, Italy, and Indonesia

Leo Agustino¹, Harits Hijrah Wicaksana²
¹Public Administration Department, Universitas Sultan Ageng Tirtayasa
²STISIP Setia Budhi Rangkasbitung
¹leo.agustino@untirta.ac.id, ²haritshijrah@gmail.com

Received: July 28 2020; Revised: October 05 2020; Accepted: November 11 2020

Abstract: This article discusses and analyzes efforts to treat the coronavirus (also known as Coronavirus Disease-19 (COVID-19)) by the governments of China, South Korea, Italy, and Indonesia. To understand the approaches each country takes is very important to get a clear picture of the efforts, steps, strategies, and policies that are formulated and implemented. To analyze COVID-19 cases in the four countries, the governance analysis framework (GAF) approach from Hamza (in Putra and Sanusi 2019) was used. This approach analyzes four aspects: scope map, stakeholder map, process map, and governance map. Articles utilizing a qualitative approach using descriptive analysis research methods. Data collection techniques used are library studies in the form of books, journal articles, online and conventional news, and the websites of authoritative institutions. Several important findings are general and specific, including, first of all, the four countries have the same orientation in handling and controlling the spread of the coronavirus. Secondly, various actors are actively involved in resolving a pandemic starting with the highest leadership of a country, medical staff and nurses, security agencies, researchers, and so on. Third, the four countries take their respective ways in solving the COVID-19 problem, but generally, they do a lockdown in addition to the health approach. Fourth, China and South Korea are considered successful examples in handling COVID19, otherwise not with Italy and Indonesia. The lack of success in Italy and Indonesia is caused by two factors, the lack of seriousness of the government and ignorance of citizens, resulting in slow handling of control and widespread of the deadly coronavirus.
Keywords: coronavirus, covid-19, pandemic, handling, policy.

Introduction

Since January 2020, Coronavirus Disease-19 (or often referred to as COVID-19; or also known as coronavirus) has infected more than 6,799,000 people worldwide. More than 397,000 people have died from this disease (who, 2020). In Indonesia itself, the spread of COVID-19 is quite massive. On March 2, 2020, there were 2 positive patients for COVID-19 and this number jumped to 5,516 people on April 17, 2020 (covid19.go.id, 2020). Many countries have been affected by COVID-19 disease. Even the World
Health Organization (WHO) has declared the spread of this disease as a pandemic (a disease that has been transmitted in many countries or continents with and infected many people) since March 11, 2020 (kompas.com, 2020). Referring to WHO, COVID-19 has plagued not only in Asia (the location where COVID-19 was first discovered), but also in Europe, America, Australia and Africa; with the largest number of cases in Europe with 1,013,093 cases (sprinklr.com, 2020).

Like a pandemic, many countries are doing their best to contain the spread and restore the conditions of exposed communities. Several methods are used by many cities, including adding health facilities (massively and quickly) to extreme methods such as isolating the city (lockdown).

So, the question now is, how is the handling carried out in countries exposed to the COVID-19 pandemic such as China, South Korea, Italy and Indonesia? What policies or concrete steps are being implemented by each country to solve the problem of the coronavirus outbreak (COVID-19)? To answer this big question, this article also discusses it by first explaining the efforts made by each country (China, South Korea, Italy and Indonesia) while comparing the efforts and implementation of the policies set by the four countries.

The four countries were chosen for several arguments, first, China was the first country where the spread of the coronavirus was discovered so it is very important to understand the policies taken by the local government; secondly, South Korea is the second-largest spreading country after China where the model of spread becomes massive through religious gatherings that are not guarded by the government (and this is different from China); third, Italy is the country in Europe which has the highest distribution; and fourth, Indonesia which responded to COVID-19 late. Have these different backgrounds helped to accelerate or slow down the success of the policies taken by the respective governments? Or, are there other factors that influence the successful implementation of government policies in the four selected countries?

The method of policy analysis which is part of policy studies has become one of the fastest-growing methods in social science in the last few decades. Policy analysis is used as an attempt by researchers to better understand the policy-making process and to provide information and alternative options for formulators to solve problems. In its development, policy studies including policy analysis methods seek to improve themselves. Therefore, currently developing several variants of policy analysis including narrative policy analysis (Roe 1994) and governance analysis framework (Hamza in Putra and Sanusi 2019).

Narrative policy analysis is a method of public policy analysis that developed in the 1980s and gained a place in policy studies in the 1990s. According to Roe (1994: 2) narrative policy analysis is, "Stories commonly used in describing and analyzing policy issues are a force in themselves, and must be considered explicitly in assessing policy options." Its meaning, stories (or in this case explanations and arguments) are generally used to describe and analyze
policy issues that should be considered in assessing policy choices.

The question is, how can narrative policy analysis be used methodologically to solve public problems? According to Roe (1994: 3-4) (can be said to be the Father of Narrative Policy Analysis) there are four steps to build arguments using the narrative method, namely: (i) the analyst identifies the conventional narratives that dominate the issue, (ii) he or she identifies the narratives that do not conform to the conventional definition, ie, “non-stories,” such as a circular argument or those that run counter to the dominant narratives, (iii) the analyst compares and contrasts the two sets of narratives to generate a metanarrative “told” by the comparison, and (iv) the analyst determines if or how the metanarrative recasts the issue in such a way as to make it more amenable to deliberation, analysis, and policymaking.

Furthermore, the governance analysis framework method or abbreviated as GAF was introduced by Hamza (in Putra and Sanusi 2019). He explained that public policy analysis must be divided into four stages. First, the scope map (mapping of the scope), where at this stage policy analysis must be able to explain three things: (i) problem streams, current problems or phenomena, (ii) solution streams, various policy alternatives involving the discourses of many actors, and (iii) political stream, decisions made by the government. Second, the stakeholder map (mapping of stakeholders or actors), which aims to understand the stakeholders (inside and outside government) or actors involved in discussing policy issues. Third, the process map, which explains the narrative of the actor-network related to policy issues. Finally, fourthly, the governance map, explains the progress or stagnation of the transformation that is being carried out so that - if the policy does not work - another strategy can be taken.

Methods

This article utilizes a qualitative approach using a descriptive analysis research method. The choice of a qualitative approach is used because of its efforts to gain a deep, authentic, and basic understanding of the phenomenon being observed or researched. While the method used in this study is descriptive. This choice is based on data and information collected focusing on the actual problem through the process of gathering, compiling, processing data, and drawing conclusions.

Where the results attempt to describe an objective empirical state of the phenomenon being studied. Meanwhile, the data collection technique used in this paper is a literature study. This is done by the author because of the limitations of researchers to interview authoritative sources directly at the time of writing.

Implementation of Large-Scale Social Restrictions (PSBB) is one of the factors that encourage the author to only use literature study as a data collection technique. At times, the literature study referred to in the context of the author of this article is the author’s attempt to find, collect, and study written material in the form of books, journal articles, online news such as (kompas.com, 2020);
(cnnindonesia.com, 2020); (theguardian.com, 2020) and conventional (such as Kompas daily), and websites of authoritative institutions including (who.int, 2020); (ourworldindata.org/COVID, 2020); (COVID19.go.id, 2020) relating to the issues being studied. Finally, the data analysis technique in this study refers to Creswell (2014) by focusing attention on organizing data, reading and memoing (making notes), as well as describing, clarifying, and interpreting data.

Result and Discussion

A. Handling Covid-19: Experience of The China Government

Coronavirus or often referred to as COVID-19 was first found in Wuhan City, Hubei Province, China (WHO 2020a). The WHO data states that in a very short span (31 December 2019 to 3 January 2020) 44 cases of COVID-19 were detected in the city. This figure jumped sharply in the range of mid-January to early February (see Figure 1). The virus spreads very fast. For example, on January 20, 2020 the number of cases in China reached 278 cases; 5 days later the figure jumped to 2,000 cases (kompas.com, 2020).

![Figure 1](image)

Data on COVID-19 Patients in Wuhan City

The Chinese Government’s first response to the massive and rapid spread of the COVID-19 disease was to record cases that occurred in cities (including in the City of Wuhan as the first location for the spread of this virus), to track or track patients who interacted with other parties. (in markets, schools, places of worship, and others), prohibiting people from crowding into public spaces, and even isolating them. Not only that. The Chinese government has also acted quickly in providing free medical testing services, both rapid test and polymerase chain reaction (PCR); increase the number of health facilities or facilities made very fast; increase the supply of drugs; to self-isolation.

From the financial side, the Chinese Government disbursed funds of US $ 38.4 billion only in January-February 2020 alone. Such funds were used, among other things, to move nearly 500,000 doctors and nurses to Hubei Province including Wuhan City, including building 16 new hospitals that were completed in a matter of days (kompas.id, 2020). In line with this, the Chinese Government has succeeded in minimizing the spread of the coronavirus, they are taking quick action...
on individuals exposed to the coronavirus, then isolating them, and tracking patient interactions, in the hope of breaking the chain of virus transmission.

However, these steps were deemed less effective until finally on January 23, 2020, the Chinese Government isolated (or locked down) the City of Wuhan. In the context of isolation, the mobility of citizens is strictly controlled by the authorities. They were prevented from leaving and entering Wuhan City, including leaving their homes.

The result of this isolation makes social mobility very limited. Even so, medical personnel and regional officials are still active in conducting early detection of individuals who are deemed to have been exposed to COVID-19; this includes finding individuals who are infected but are reluctant to self-report or avoid treatment from the authorities. Interestingly, the Chinese Government is working with the WeChat application service provider to provide free facilities for the public to consult or connect with doctors. This application also integrates with drug delivery services, especially in areas with high infection rates. The Chinese government’s efforts as mentioned above in the context of tackling the corona are considered effective in reducing the spread of the outbreak.

Cases of transmission between individuals within cities or between cities will no longer occur in early March 2020. Even if there are cases of transmission of the coronavirus it is caused by migration from outside the country. For example, on March 4, 2020 there is a Chinese citizen who has just returned from Italy and tested positive for COVID-19 (corriere.it, 2020).

Other data shows there were also 67 coronavirus patients who came from outside of China in mid-March 2020. Starting from this experience, the Chinese Government has also begun to concentrate on implementing strict inspection standards in monitoring the health of aircraft passengers at airports, especially from countries experiencing a spike in COVID-19 infections, such as South Korea and Italy. Also, the number of individuals exposed to COVID-19 is decreasing day by day, as shown in Figure 2.

Figure 2
COVID-19 Cases in Several Countries

Source: (ourworldindata.org, 2020)
B. Handling Covid-19: Experience of The South Korea Government

Apart from China, a country that is preoccupied with handling the coronavirus (COVID-19) is South Korea. The first case of COVID-19 found in South Korea took effect on January 19, 2020, who was identified as a Chinese citizen, while the first South Korean citizen to be exposed to COVID-19 was a 55-year-old man who worked in Wuhan (straitstimes.com, 2020). When he returned to Seoul, he got his health checked. After intensive examination, it turned out that the man was exposed to COVID-19.

However, the "explosion" in South Korea did not occur at the end of January. The spike occurred in early March 2020 (see Figure 3), wherein mid-February 2020, the Shincheonji Religious organization held a massive gathering in Daegu City (Gyeongsang Province) to celebrate their big day. Many of these religious members who attended the celebration eventually contracted the coronavirus and triggered a drastic increase in the spread of COVID-19 infection cases in South Korea (theguardian.com, 2020; foreignpolicy.com, 2020). After that meeting, a few days later the number of cases of South Koreans exposed to COVID-19 jumped sharply (as can be seen in Figure 2 below). The South Korean government, for example, announced that the COVID-19 outbreak associated with the Shincheonji Religious Organization totaling 4,482 people has been infected or equal to 62.8% of the total cases in South Korea (m.koreatimes.co.kr, 2020).

Figure 3
Increase in the Number of COVID-19 Cases in South Korea (cases per day)

![Chart showing increase in COVID-19 cases in South Korea](en.wikipedia.org, 2020)

Even the number of COVID-19 cases in South Korea at the peak of the spread of COVID-19 in mid-March 2020 had reached 8,086 cases with a death toll of 72 people (coronaboard.kr, 2020). As a result of the extraordinary spread in organization (m.koreatimes.co, 2020).

Daegu City, Gyeongsang Province, this city has been labeled as the epicenter of the spread of COVID-19 in South Korea. In this city alone there are 5,571 cases of COVID-19 until March 9, 2020 - including members of the Shincheonji Religious

Then the question is, what policy is
being taken by the South Korean Government to minimize the spread of the coronavirus? Initially, the South Korean government did not impose restrictions on mobility or migration of people (social restrictions or lockdowns). The strategy adopted by the South Korean government at that time was to carry out close monitoring by allowing the city to live and run normally. The South Korean government has also deployed a massive city cleaning of public facilities and social facilities carried out by health workers using PPE by spraying disinfectants. Spraying was carried out at stations, terminals, airports and also other public spaces. Even though in the early days the South Korean government did not isolate the city, many offices closed their employees; in addition to the awareness of the public to choose to stay at home in isolation.

However, when the "Shincheonji Case" surfaced with the number of individuals infected or exposed to the coronavirus soaring, other policies were taken by the authorities. The President of South Korea, Moon Jae-in, at the end of February 2020 followed up on a development that was getting out of hand by declaring a state of emergency. Among other things, conducting rapid tests on most of the people of South Korea (see Figure 4), implementing city isolation (lockdown), prohibiting individual visits or arrivals from China, and limiting the mobility of the community. Because the mobility of citizens is limited, the consequence is that the South Korean government is obliged to provide subsidies in the form of special funds to facilitate the lives of citizens. The government re-records all its citizens, both healthy and exposed to the coronavirus to isolate those who are infected. The South Korean government has also increased the number of doctors and nurses in the epicenter areas and has been supplying large quantities of medicines.

**Figure 4**  
COVID-19 Tests in Several Countries (per 1,000,000 population)

Source: (ourworldindata.org/COVID, 2020)
C. Handling Covid-19: Experience Of The Italian Government

The spread of COVID-19 is not only happening in Asia, but on all continents. The largest spread of the coronavirus outside China in the early days of its spread occurred in Europe. Data on March 13, 2020 shows that there are approximately 44,000 people exposed to the coronavirus in the blue continent, where most cases occurred in Italy with 15,000 cases, followed by Spain with 4,200 cases, in France with 2,860 cases, and in Germany with 2,369 cases. (telegraph.co.uk, 2020).

Italy confirmed the first cases of COVID-19 infection on January 31, 2020. The individuals exposed to COVID-19 were two Chinese nationals who were traveling to Italy (corriere.it, 2020). The spread has become very massive because Italy is a high tourist area in Europe. Therefore, it is not surprising that on 19 March 2020 (one month and a half after the discovery of the first case) there were more than 41,000 cases of COVID-19 and 3,400 cases of death caused by the coronavirus. Referring to Figure 5, it can be seen that the number of new COVID-19 cases per day has crept up (not to say jumping) from the beginning of March to the end of March 2020. Unfortunately, this number has never dropped from the number of 3,000 new cases per day. Departing from this condition, it is not surprising that the Italian Government considers that the coronavirus is very dangerous and very deadly. This figure makes Italy the country with the most coronavirus infections not only in Europe, but also in the whole world outside China.

For the above reasons, since February 2020 the Italian Government has taken swift action to declare the country in a state of emergency against the coronavirus. From then on, the Italian government carried out large-scale socialization of the clean and healthy living movement for its citizens to limit the spread of coronavirus infection. For example, this can be seen from the website of the Ministry of Health (Ministero Della Salute), which produces short videos, infographics, and other types of socialization displays that encourage people to live clean and healthy lives (see Figure 6). The aim is to build citizen awareness and get used to behavior to prevent the dangers posed by this deadly virus. Not only that, information disclosure is another policy
established in Italy to avoid citizens’ suspicion and hoax issues that are very confusing in uncertain conditions. To build citizen trust, all actions taken by the government to inhibit and minimize the spread of COVID-19 are publicly informed. In line with that, the Italian Ministry of Health opened a telephone service (with the number 1500) to answer all questions about the coronavirus and first aid for those who were exposed. The truth begins with knowing various things about COVID-19 carefully (washing hands, handling people exposed to the coronavirus, etc.) so that all citizens can learn to deal with it appropriately and protect themselves against the possible dangers of COVID-19 which are very deadly.

The Italian government has also implemented regional isolation (lockdown). This isolation was carried out in 2 stages. The first phase was held on 9 February 2020 covering 2 provinces (Lodi and Padua) (metro.co.uk, 2020) and, the second phase, was held on March 8, 2020 for all provinces (repubblica.it, 2020). This policy was taken because the Italian Government considered the lockdown in the first stage was considered to have failed to prevent the spread of the coronavirus out of the two provinces. The question is, what steps were taken in the second phase of lockdown? One certain thing is the closure of access to exit and entry to isolated areas. The penalty for violating the policies set by the government is a fine of € 206 or imprisonment for three months. The army, police and other law enforcement agencies were instructed to secure and enforce the isolation policy. Schools and campuses were also closed, all public events were canceled, commercial activities were stopped or even if they got a permit, these activities could only be held until 18.00 local time. Regional train services were canceled. Postponed all football leagues throughout Italy. Various places that involve large numbers of people gathering, such as: museums, cinemas and nightclubs are also closed. In essence, the Italian Government (through Prime Minister Giuseppe Conte) expects its citizens to remain at home, except for certain jobs and emergencies.

**D. Handling Covid-19: Experience Of The Indonesian Government**

The Indonesian government confirmed the first case of COVID-19 on March 2, 2020 (cnnindonesia.com, 2020). Although one month earlier, a professor of epidemiology from Harvard T.H. Chan School of Public Health (Harvard University), Professor Marc Lipsitch, stated that the COVID-19 virus may have spread in Indonesia, but the Indonesian Government has failed to detect it (kompas.com, 2020). His explanation is based on his research related to a large number of passengers from China around the world, including Indonesia. With Jakarta as the epicenter of the spread in Indonesia (see Figure 6).
Looking at the ever-increasing graph, the Indonesian Government has formulated several policies to anticipate the spread of COVID-19, including banning all flights to and from China. The Indonesian government has also stopped granting visas for Chinese citizens to travel to Indonesia.

This policy was taken because the Indonesian Government has determined that the COVID-19 virus outbreak is a national scale disaster that must be resolved unusually (nasional.kompas.com, 2020); even though the presidential decree was only issued on April 13, 2020 (Presidential Decree No.12 of 2020 concerning the Determination of Non-Natural Disasters Cause of Coronavirus Disease 2019 (COVID-19) As a National Disaster.

On the health side, the Indonesian Government is taking steps such as providing comprehensive information to health workers regarding the protocol for dealing with the COVID-19 outbreak. Accordingly, efforts to provide masks, personal protective equipment (PPE), and medicines were also carried out. Steps like those taken in Wuhan were also taken, such as converting several hotels into special hospitals for handling COVID-19. Furthermore, coordination with local governments continues to encourage several regional hospitals (RSUD) and private areas to become referral hospitals in the regions when people need COVID-19 handling services.

But unfortunately, coordination between the national government and local governments has not been smooth - at least until early April 2020 before the implementation of Regulation of the Minister of Health Number 9 of 2020 concerning Guidelines for Large-Scale Social Restrictions in the Context of Accelerating Handling of Coronavirus Disease 2019 (COVID-19) (referred to as also with the PSBB (Large-Scale Social Restrictions). This disharmony can be seen from the poor communication and coordination between the national government and the Jakarta Provincial Government (the epicenter of COVID-19 in Indonesia).

The Indonesian government is also working to optimize tests for the spread of COVID-19 in many areas. The goal is that the spread of the coronavirus can be localized if the government has a map of the distribution of COVID-19 through the test results. But unfortunately, the number of COVID-19 tests in Indonesia is considered too small (when compared to other countries and also when compared to the population) (see Figure 7).
Apart from that, in other areas the Indonesian government has adopted another strategic policy, namely closing schools, campuses, including several government offices and private companies. Like the countries above, the Indonesian Government also prohibits activities that involve large numbers of people (to gather), including religious activities and socio-cultural activities.

To strengthen this appeal, on April 3, 2020, the Government of Indonesia issued Regulation of the Minister of Health Number 9 of 2020 concerning Guidelines for Large-Scale Social Restrictions in the Context of Accelerating Handling of Coronavirus Disease 2019 (COVID-19); in collaboration with local governments.

To get optimal results, the Government of Indonesia also issues basic food cards, accelerates the issuance of pre-employment cards, exempts electricity tariffs on households using 450 VA power users, strengthens cash-intensive programs, and several other policies (setkab.go.id, 2020).

E. Comparison of Handling Covid-19: Experiences Of 4 Countries

Referring to the theoretical explanation (in the previous section), the latest model of policy analysis focuses more on ideas, narratives, discourse, and discourse to understand the context including policy implementation. Using the same approach, this article analyzes the handling of COVID-19 cases in China, South Korea, Italy and Indonesia. As a political decision, the policies taken by each country can be said to be replicating the policies produced by the Chinese Government.

This is because that's where the coronavirus first appeared. Therefore, the Chinese Government is conducting trial and error to stop the rate of exposure and death caused by the coronavirus. One thing is certain, from several countries analyzed by the author, most of them have isolated cities, except Indonesia. The Indonesian government implements Large-Scale Social Restrictions or abbreviated as PSBB, which is different from lockdown in its true meaning. This is because PSBB still allows human mobility
from one area to another.

Is it only social distancing or lockdown policies that are implemented? Certainly not. As discussed in the previous section, several countries implement several policies, some of which are similar policies. But there are also several different policies. What are the policies? By using the GAF (governance analysis framework) method, this section seeks to explain the comparison of policies taken by each country to deal with COVID-19.

First, the scope map; the four countries (China, South Korea, Italy and Indonesia) fully understand the problems they face. The problem is the massive spread of Coronavirus Disease-19 (COVID-19) which is multiplying by infecting as many people as possible. Although this virus is not as vicious and deadly as severe acute respiratory syndrome (SARS), COVID-19 is attacking more people with a hundred times more total deaths. As of this writing (April 15, 2020), this virus has infected 6,799,713 people in 216 countries, with 397,388 people died, and the rest recovered (who.int, 2020). Because this virus has contaminated more than 200 countries, it is not surprising that WHO declares this condition a world epidemic. To anticipate this, WHO published a strategic guide in dealing with COVID-19 with the headline "2019 Novel Coronavirus (2019-nCoV): Strategic Preparedness and Response Plan" (2020). With the awareness of this problem, many countries are aware (including the four countries analyzed in this article) to minimize and to the extent possible stop the spread of this deadly virus. In the context of the problem stream, the four countries agree on the problem or phenomenon they are facing.

Meanwhile, in the solution stream aspect, the four countries took different steps and paths. This is because every country has a different background, income level, education level, and health level, so the alternatives they implement are different. For example, van Doremalen et al. (2020) in an article entitled, "Aerosol and Surface Stability of SARS-CoV-2 as Compared with SARS-CoV-1" (2020) explains that the coronavirus can last from hours to days on different mediums.

According to them, the coronavirus can last several hours in the air, last 4-8 hours in copper medium, last 24 hours in cardboard medium, last for 2-3 days in plastic and stainless media, and several other mediums (van Doremalen et al. 2020: 1). The good news from the study of Doramalen et al. (2020), this virus can be inactivated in a matter of minutes by spraying surfaces exposed to 62-71% alcohol, or 0.5% hydrogen peroxide bleach, or bleach-containing 0.1% sodium hypochlorite (van Doremalen et al. 2020: 1). Such elaborative descriptions with explanations of the variation in the duration of coronavirus contamination in different mediums certainly encourage each country to socialize in various ways and techniques. China as the first country exposed to the coronavirus certainly did not pay attention to this, as well as Indonesia which was too "slow" to anticipate this, including in terms of socialization. It is also different from the solution taken by South Korea. South Korea swiftly carries out sterilization (spraying infused in several important locations) to minimize the infection that occurs. Also, South Korea has from the
beginning implemented a healthy way of life, where masks are commonplace used in public areas. This also accelerated the decline in the infection curve in the Ginseng Country.

The solution stream is closely related to the political stream aspect because of the several policy alternatives made by the four countries, not all of them have taken the same steps, although some have replicated the strategies and steps adopted by the Chinese Government. What are the examples from China? One thing that appears is the lockdown. Unfortunately, the implementation of territorial isolation in several countries has failed. In Italy, death cases due to COVID-19 jumped dramatically from 463 cases (on March 9, 2020) to 11,591 cases (on March 30, 2020), and increased to 14,681 cases on April 4, 2020 (Lako 2020: 6).

This means, the isolation of regions such as China and South Korea will not always run smoothly. Meanwhile, Indonesia has not implemented a lockdown because the Indonesian government is taking its steps called Large-Scale Social Restrictions (PSBB). The initial implementation of the PSBB in Jakarta (starting April 10, 2020) and Bogor, Depok, and Bekasi (April 15, 2020) can be said to be less successful because there are still many rules that are violated by the wider community (video.medcom.id, 2020); (bisnis.tempo.co, 2020); (investor.id, 2020).

Unfortunately, even though PSBB has failed to reduce the curve of people exposed to COVID-19, the Indonesian Government has instead taken steps to relax the PSBB. The reason is that the PSBB encourages economic contraction which endangers the Indonesian economy in the short and medium-term. This political stream was taken to balance the Indonesian economic curve which was already under heavy pressure. Although easing in the world of education is still being considered to be opened. In this context, the Indonesian Government is still worried about the formation of new clusters if schools and colleges are opened during the New Normal transition period.

Besides, another problem that causes the Government of Indonesia's decision to be less strategic in dealing with COVID-19 is the weakness in determining the priority scale in terms of budget. The Indonesian Government disbursed funds not to anticipate the spread and control of COVID-19. The disbursement of these funds is used for media and influencers to promote Indonesian tourism. Why is that? The government assesses the impact of the decline in world tourism, opening up opportunities for tourism in Indonesia. Therefore, the Government of Indonesia provides incentives for foreign tourists which are budgeted at Rp. 298.5 billion, with details: subsidies for discounted flight tickets of Rp. 98.5 billion, a promotional budget of Rp. 103 billion, tourism activities of Rp. 25 billion, and Influencer services of Rp. 72 Billion (Sani, 2020). This step certainly backfired the government because it not only received widespread criticism, but also showed the government's lack of priority in preventing the spread of COVID-19.

Second, the stakeholder map
I discuss the involvement of actors in playing their respective duties in dealing with the spread of the coronavirus. As an epidemic that "attacks" more than 200 countries, it is not surprising that many actors intervene in this matter. Why are there so many actors? Several countries have implemented city isolation to prevent the spread of the coronavirus, as a result, bureaucrats (national and regional), medical personnel, nurses, police, teaching staff (lecturers and teachers), researchers, and many more.

The national and local governments, in several countries, have prepared regulatory instruments to regulate the behavior of people who are unfamiliar with the current cases. People are asked to get along to carry out isolation which has never been done so far; the market is disabled, mass transportation is stopped, entertainment centers are closed, and many more. The people's habit of visiting the market, using mass transportation, and unwinding by visiting entertainment centers has been delayed for several weeks. To enforce the rules set by the government, law enforcement officials are mobilized. In the case of Indonesia, the police, assisted by the civil service police unit (Satpol PP), are actively involved in the success of the government's plan.

On the other hand, researchers also played a significant role, especially in finding a vaccine or anti-virus COVID-19. Luckily, early studies found that the coronavirus could be inactivated by using alcohol or household bleach (van Doremalen et al. 2020: 1). Furthermore, several researchers are continuing to examine the efforts that can be made to recover patients infected with the coronavirus and their provisional findings are encouraging (Thevarajan et al. 2020).

When on the medical side, of course doctors and nurses are the spearheads of controlling the coronavirus. Even though they have to be affected by COVID-19 itself. Referring to, more than 15 doctors have died due to exposure to the coronavirus, they include: Prof. Dr. dr. Iwan Dwi Prahasti (Professor of FK UGM), Prof. Dr. dr. Bambang Sutrisna (Professor of FK UI), dr., Bartholomeus Bayu Satrio (IDI West Jakarta), and several other names (kompas.com, 2020).

Stakeholders at the regional level take on their respective roles. In essence, all parties are moving to one destination, namely handling the spread of the coronavirus in each country. In the case of Indonesia, there is weak coordination between the national government and local governments. This can be seen in the implementation of the PSBB in several regions. In mid-March 2020, for example, the national government decided not to adopt regional isolation (or PSBB) because it would disrupt the people's economy. Therefore, the decision is to apply social or physical distancing throughout Indonesia. But in reality, five regions, such as: Bali, Papua, Solo, Maluku, and Tegal oppose the national government's policy by implementing lockdowns on different scales.

Third, the process map; explain the actor's narrative regarding the issues being discussed. In this context, the author seeks to present conversations other than in the four selected countries. This is intended to gain a broader understanding. The narrative is very important to understand the responsiveness or responsiveness of actors or stakeholders in each country in
responding to the COVID-19 pandemic. Recently, the discussion about the existence of anti-science state actors, especially at the national level, has caused the government’s failure to handle the spread of the coronavirus into an interesting discussion - as well as part of the analysis in the context of the process map.

Another problem that causes Indonesia to be less successful in controlling the spread of the coronavirus is the indifference of citizens to the government’s appeal. This can be seen from the fact that there are still many people gathering in cafes, malls, or using public vehicles without wearing masks and without paying attention to the distance set by the government.

For example, a student hit police officers who were promoting the ban on hanging out in coffee shops during the COVID-19 outbreak (news.detik.com, 2020), the crowds of people roam in public spaces without wearing masks even though large-scale social restrictions have been imposed (mediainindonesia.com, 2020), low discipline on physical distancing, and many more examples can be written here.

Finally, fourth, the governance map discusses the progress or stagnation of policy implementation. Referring to the situation on the ground, it can be formulated that China and South Korea are successful examples of handling COVID-19. This means that the two countries have succeeded in implementing formulated policies with positive results. Implement lockdown; conduct rapid testing and PCR on the citizens of each country; implementing social distancing; constructing mobile test centers (sometimes in the form of drive-thru) construction of new hospitals; converting several hotels, school buildings, and meetinghouses into a temporary hospital; mobilizing medical personnel and nurses to the epicenter of the corona; provide strict and harsh sanctions for violators; provide and distribute personal protective equipment; do the socialization widely; closed schools and campuses; broadcast to cellphone users; and monitoring the movement of people under surveillance (ODP) using a GPS (global positioning system). These are some of the policies implemented in the form of programs, activities and measures by the two countries.

On the other hand, Indonesia and Italy (especially in the early period) are examples of stagnation in the governance map. This stagnation or lack of success, according to the author's analysis, is caused by four factors. First, the government is not serious because it underestimates the very fast, wide, and massive spread ability of the coronavirus including its deadly power, which implies slow decision-making in dealing with the spread of the coronavirus.

The continued consequence of slow decision-making made the two countries confused when COVID-19 hit Italy and Indonesia. Even though Italy is one of the countries in Western Europe that has a very advanced health system. Unfortunately, Italy has become the second-worst infected country after China. In Indonesia, this lack of seriousness is shown by narratives that underestimate the reach and destructive power of COVID-19. He rejected the
narrative of the Minister of Health who rejected the results of the study by the Research Team from Harvard which explained (possibly) that there were already Indonesian citizens who were exposed to the coronavirus and he refused and the Indonesian people seemed immune from the coronavirus or the coronavirus could be expelled by using prayer. Besides, the Indonesian government continues to open and even attract foreign tourists during an increasingly massive epidemic and the WHO has not prepared a standard operating procedure (SOP) in anticipation of COVID-19 (tracking, test, and treating).

The second factor is citizens’ ignorance of the very deadly dangers of COVID-19. This ignorance is due to weak socialization carried out by the government, including local governments and their staff. The Indonesian government is not optimally socializing the need to live clean and healthy - including by using masks and washing hands frequently - because several mediums can be a conduit for the spread of COVID-19. The third factor is the lack of concern of residents with the government’s appeal, thus accelerating the spread of the coronavirus. In Italy, when the lockdown was about to be implemented (in the Lombardy region (the area with the highest exposure)) it was precisely then that residents from the Lombardy region traveled to other areas that were not isolated. This migration has led to the spread of the coronavirus in Italy. Meanwhile in Indonesia, the government’s directive to stay at home is considered a windfall. There are still many residents who gather both at coffee shops, markets, restaurants, and others. On the other hand, the absence of strict sanctions has made citizens ignorant or even afraid of government directives. And, the fourth factor is the importance of meeting the necessities of life, resulting in some residents ignoring the orders of social distancing. This neglect can also be seen in the implementation of the PSBB in many areas and the prohibition of going home (mulih ka udik) or returning home on the Lebaran 1 Syawal 1441 Hijriah holiday.

The combination of the four things mentioned above explains the success or failure of the governance map in the four countries analyzed. As a common activity, in the end, Italy and Indonesia also took steps such as carrying out strict isolation (in Indonesia large-scale social restrictions (PSBB) were implemented); perform a rapid test and PCR; change the function of several hotels; conference hall, and others as a special hospital for handling COVID-19; closed schools and campuses; close down facilities or entertainment centers. As an additional illustration, Table 1 below describes the comparison of policies (in simple terms) of the four countries to seek treatment and care and treatment to control COVID-19.
## Table 1
### Comparison of Efforts in China, South Korea, Italy and Indonesia

| Country   | Handling Efforts                                                                 | Treatment and Medication                                                                 |
|-----------|----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| China     | 1. Do lockdown in several cities.                                                 | 1. Build a special COVID-19 hospital.                                                    |
|           | 2. Prohibit people from gathering in public spaces.                               | 2. Converting schools, hotels and office buildings to be converted into care and medical facilities. |
|           | 3. Record and track COVID-19 cases from house to house.                          | 3. Create a direct service system for doctors, pharmacies, and clients using the WeChat application. |
|           | 4. Carry out massive rapid tests and PCR.                                         |                                                                                          |
|           | 5. Vacationing schools and colleges as well as several government and private offices. |                                                                                          |
|           | 6. Provide free medical examination services.                                     |                                                                                          |
|           | 7. Checks at airports, stations, terminals and other public places.               |                                                                                          |
| South Korea | 1. Do lockdown in several cities.                                                 | 1. Provide special funds for health facilities.                                          |
|           | 2. Prohibit the mobility of citizens to and from China.                           |                                                                                          |
|           | 3. Prohibit people from gathering in public spaces.                               |                                                                                          |
|           | 4. Carry out massive rapid tests and PCR.                                         |                                                                                          |
|           | 5. Vacationing schools and colleges as well as several government and private offices. |                                                                                          |
| Italy     | 1. Do lockdown in several cities.                                                 | 1. Implement quarantine for anyone affected by COVID-19 for 14 days.                     |
|           | 2. Provide disclosure of information about COVID-19.                               |                                                                                          |
|           | 3. Perform a massive rapid test.                                                 |                                                                                          |
|           | 4. Disseminating rules and encouraging clean and healthy living habits.           |                                                                                          |
|           | 5. Prohibit the mobility of citizens to and from China.                           |                                                                                          |
|           | 6. Vacationing schools and colleges as well as several government and private offices. |                                                                                          |
|           | 7. Shut down entertainment                                                         |                                                                                          |
8. Open a telephone service.
9. Returning foreign citizens visiting Italy who are at risk of COVID-19.

Indonesia
1. Conducting PSBB in several cities.
2. Prohibit people from gathering in public spaces.
3. Vacationing schools and campuses as well as several government and private offices.

Source: compiled from various sources by the author (2020)

Conclusion

Coronavirus Disease 2019 (COVID-19) is a world pandemic that started in Wuhan City, China. This article discusses the efforts made by the Governments of China, South Korea, Italy and Indonesia in dealing with the spread of COVID-19, including its control. To understand and analyze the spread and control of coronavirus cases in China, South Korea, Italy, and Indonesia, the author uses a governance analysis framework (also known as GAF) approach from Hamza (in Putra and Sanusi 2019) and utilizes study data collection techniques. literature. Books, journal articles, online news, newspapers, and websites of authoritative institutions are maximally utilized to get the latest data and information.

The findings of this study are interesting because there are general and specific findings (referring to the GAF approach). Among them, first, the four countries (China, South Korea, Italy and Indonesia) have the same orientation in the COVID-19 issue, namely trying to handle and control the spread of the virus. Even though the level of awareness of each country is different. China and South Korea from the start recognized the dangers of this virus to the health and lives of their respective citizens. Meanwhile, Italy and Indonesia were late in responding (not to say they were aware of) to the ferocity of the coronavirus, which had an impact on the increasing number of people infected with COVID-19. Second, stakeholders or actors who are actively involved in solving the pandemic are very broad, starting from the head of government, medical and nursing personnel, security agencies, researchers, and so on. In all countries studied, the government has become the main backbone in the policy formulation process - which is then implemented by many stakeholders - to control the spread of the coronavirus. Third, the process map, the four countries are taking their steps and ways of handling COVID-19. This is based on the narratives discussed by policy actors. There are two poles of the process map in this study, namely the anti-science narrative and the science-based narrative. In countries categorized as anti-science, Indonesia and Italy (in the early period),
The handling of the COVID-19 infection was carried out slowly because they underestimated the spread and destructive power of the COVID-19 virus. Italy realized this too late when the death toll jumped from 463 in early March to 11,591 at the end of March 2020. Meanwhile, China and South Korea have responded to the epidemic from the start in a responsive manner. Finally, fourthly, this study finds that China and South Korea are successful examples of handling COVID-19, whereas Indonesia and Italy (in the early period) are examples of the lack of success in controlling the spread of COVID-19. This lack of success was caused by two factors: (i) the government’s lack of seriousness (because it underestimated the coronavirus) in dealing with the spread of the coronavirus and (ii) the ignorance of residents of the government's appeal, thus slowing the process of recovering the situation.

Based on the overall description, several strategic steps that can be taken to control COVID-19 are as follows: first, implementing social distancing to prevent the spread of the coronavirus including controlling population migration. Second, collect data on exposed residents and open the data to the public as widely as possible so that the public can avoid contact (for the time being) with infected people. Third, conduct rapid tests and PCR on as many residents as possible. Fourth, providing a special hospital for individuals exposed to COVID-19; if necessary, change the function of some hotels, conference hall or the like for this purpose. Fifth, temporarily closing locations that are usually used for gathering places such as schools, campuses, malls, cinemas, tourist attractions, houses of worship, and other public facilities. Sixth, increase the number of medical personnel and nurses while protecting them by providing complete personal protective equipment, adding medicines, equipment, and special medical devices to deal with COVID-19. Seventh, conduct intensive coordination and communication between all parties, including those who are exposed or not, to socialize, control, and control the spread of the coronavirus. The eighth, the last option, is to carry out a tight, firm and tough lockdown.

About Authors

Leo Agustino is lecturer at Universitas Sultan Ageng Tirtayasa, his research focus on public policy.

Harits Hijrah Wicaksana is lecturer at STISIP Setia Budhi Rangkasbitung, his research focus on governance and public policy.

Acknowledgements

The authors gratitude to all who support this research to be proper to publish.

References

Creswell, J.W. 2014. *Penelitian Kualitatif & Desain Riset (Edisi 3)*. Terjemahan. Yogyakarta: Pustaka Pelajar.

Czarniawska, B. 1997. *Narrating the Organization: Dramas of Institutional Identity*. Chicago: Chicago University Press.

DeLeon, P. And Vogenbeck, D.M. 2007. The Policy Science at the Crossroads.
Dalam Frank Fischer, Gerald J. Miller, and Mara S. Sidney (Eds.). *Handbook of Public Policy Analysis: Theory, Politics, and Methods*. Boca Raton, FL: CRC Press, pp. 3-14.

Dickie, W.M. 2001. *Bridges and Watersheds: A Narrative Analysis of Water Management in the Netherlands, England and Wales*. Amsterdam: Aksant.

Dryzek, J.S. 1982. Policy Analysis as a Hermeneutic Activity. *Policy Sciences* 14(3), pp. 309-329.

Dunn, W.N. 1994. *Public Policy Analysis: An Introduction 2nd Edition*. New Jersey: Prentice-Hall.

Dye, T.R. 2013. Understanding Public Policy 14th Edition. New Jersey: Pearson.

Egeberg, M. 1995. Bureaucrats as Public Policy-Makers and Their Self-Interests. *Journal of Theoretical Politics* 7(2), pp. 157-167.

https://bisnis.tempo.co/read/1331334/penumpang-krl-membeludak-kadin-pemerintah-gagal-antisipasi (accessed: 15 April 2020).

https://coronaboard.kr/en/ (accessed: 11 April 2020).

https://en.wikipedia.org/wiki/2020_coronavirus_pandemic_in_Italy (accessed: 12 April 2020).

https://en.wikipedia.org/wiki/2020_coronavirus_pandemic_in_South_Korea (accessed: 11 April 2020).

https://id.wikipedia.org/wiki/Pandemi_koronavirus_di_Indonesia (accessed: 13 April 2020).

https://investor.id/from-the-readers/krl-commuter-line-jaga-jarak-penumpang-gagal-jaga-jarak (accessed: 15 April 2020).

https://medianew.id/read/detail/302049-masyarakat-belum-sepenuhnya-peduli-himbauan-pakai-masker (accessed: 17 April 2020).

https://metro.co.uk/2020/02/25/towns-italy-lockdown-coronavirus-12298246/ (accessed: 12 April 2020).

https://nasional.kompas.com/read/2020/03/17/17455041/bnpb-wabah-COVID-19-di-indonesia-bencana-skala-nasional (accessed: 13 April 2020).

https://news.detik.com/berita/d-4956225/kebantuan-olah-mahasiswa-pukul-polisi-nggara-bubarkan-nongkrong-cegah-corona (accessed: 17 April 2020).

https://ourworldindata.org/COVID-testing (accessed: 11 April 2020).

https://ourworldindata.org/grapher/COVID-confirmed-daily-cases-epidemiological-trajectory?country=CHN (accessed: 10 April 2020).

https://ourworldindata.org/COVID-testing#source-information-country-by-country (accessed: 13 April 2020).

https://republika.co.id/berita/q8sehu366/pakar-kesehatan-disiplin-jaga-jarak-warga-indonesia-rendah (accessed: 17 April 2020).

https://video.medcom.id/crosscheck/0k0VvWk-yusril-jika-psbb-gagal-pemerintah-harus-terapkan-karantina-wilayah (accessed: 15 April 2020).

https://www.cnn.com/2020/03/20/europe/italy-military-coronavirus-
Agustino and Wicaksana, Policy Analysis of Handling COVID-19: Experience China, South Korea, Italy, and Indonesia

https://www.cnnindonesia.com/nasional/20200302111534-20-479660/jokowi-umumkan-dua-wni-positif-covid-19-di-indonesia (accessed: 13 April 2020).

https://www.corriere.it/cronache/20_ge
nnaio_30/coronavirus-italia-corona-
d6dc436-4343-11ea-bdc8-faf1f56f19b7.shtml (accessed: 12 April 2020).

https://www.corriere.it/cronache/20_fe
braio_24/coronavirus-italia-ultime-
otizie-oggi-nord-23035e06-56ce-
11ea-b89d-a5ca249e9e1e.shtml (accessed: 12 April 2020).

https://www.COVID19.go.id (accessed: 17 April 2020).

https://www.dw.com/en/coronavirus-
latest-italy-deaths-surge-past-
china/a-52831884 (accessed: 11 April 2020).

https://www.forbes.com/sites/avivahwit-
tenbergcox/2020/04/13/what-do-
countries-with-the-best-coronavirus-
reponses-have-in-common-women-
leaders/#c8521553dec4 (accessed: 16 April 2020).

https://www.kompas.com/sains/read/2
020/03/12/083129823/who-resmi-
sebut-corona-covid-19-sebagai-pandemi-global (accessed: 10 April 2020).

https://www.kompas.com/tren/read/20
20/01/28/054600665/rekaper-
merkembanan-virus-corona-wuhan-
dari-waktu-ke-waktu (accessed: 10 April 2020).

https://www.kompas.com/tren/read/20
20/02/11/070000665/pernyataan-
ahli-harvard-who-hingga-kemenkes-
saat-indonesia-negatif-virus (accessed: 13 April 2020).

https://www.kompas.com/tren/read/20
20/04/05/15000765/18-dokter-
indonesia-meninggal-selama-
pandemi-virus-corona-berikut-
daftarnya (accessed: 16 April 2020).

https://www.kompas.com/tren/read/20
20/04/09/pelajaran-dari-wuhan-
pandemi-korona-terbukti-bisa-
dikalahkan/?_t=rp2U3oA7o6wUvXu 
TCg5Q755ys0cTc8uqT1Xpun2NRv 
GZf3cyyi8jNvtjlgAXim (accessed: 11 April 2020).

https://www.koreatimes.co.kr/pages/article.
asp?newsIdx=285870 (accessed: 11 April 2020).

https://www.nature.com/articles/d4158
6-020-01068-3 (accessed: 16 April 2020).

https://www.repubblica.it/cronaca/2020
/03/07/news/coronavirus-chiusa-la
_lombardia_e_11_province_-250570150/?ref=RHPPTPBH-
0250571072-C12-P2-S1.12-T1 
(accessed: 12 April 2020).

http://www.salute.gov.it/portale/nuovoc
oronavirus/homeNuovoCoronavirus.jsp?lingua=english (accessed: 20 April 2020).

https://setkab.go.id/pemerintah-berikan-
6-program-bantuan-tambahan-
hadapi-pandemi-COVID-19/ (accessed: 13 April 2020).

https://who.sprinklr.com (accessed: 17 April 2020).

https://www.straitstimes.com/asia/east-
asia/coronavirus-south-korea-
reports-161-new-cases-bringing-total-to-763 (accessed: 11 April 2020).

https://www.telegraph.co.uk/global-health/science-and-disease/coronavirus-news-latest-italy-uk-china-tenerife-death-toll/ (accessed: 12 April 2020).

https://www.theguardian.com/world/2020/feb/22/coronavirus-south-korea-sees-huge-jump-cases-china-hubei-wuhan-outbreak (accessed: 11 April 2020).

https://www.who.int/emergencies/diseases/novel-coronavirus-2019 (accessed: 15 & 17 April 2020).

Lako, A. 2020. Hindari “Lockdown.” Harian Kompas, 7 April 2020, pg. 6.

Laswell, H.D. 1968. Policy Science. International Encyclopedia of the Social Science 12, pg. 181-189.

Laswell, H.D. 1971. Pre-View of Policy Science. New York: American Elsevier.

Lowi, T. and Ginsburg, B. 1996. American Government: Freedom and Power. New York: Norton.

Majone, G. 1989. Evidence, Argument, Persuasion in the Policy Process. New haven: Yale University Press.

Putra, F. Dan Sanusi, A. 2019. Analisis Kebijakan Publik: Neo-Institusionalisme Teori dan Praktik. Jakarta: LP3ES.

Roe, E.M. 1994. Narrative Policy Analysis: Theory and Practice. Durham: Duke University Press.

Sani, A.F.I. (2020). Genjot Pariwisata, Pemerintah Anggarkan Rp 72 M untuk Influencer. (Tempo Online, 25 Februari 2020), dari: https://bisnis.tempo.co/read/1312156/genjot-pariwisata-pemerintah-anggarkan-rp-72-m-untuk-influencer (accessed: 2 Juni 2020).

Steven, H. 2020. Why Outbreaks Like Coronavirus Spread Exponentially, and How to “Flatten the Curve.” (Online). Dari: https://www.washingtonpost.com/Graphics/2020/world/coronavirus-simulator/ (accessed: 10 April 2020).

Thevarajan, I., Nguyen, T.H.O., Koutsakos, M., Druce, J., Caly, L., van de Sandt, C.E., Jia, X., Nicholson, S., Catton, M., Cowie, B., Tong, S.Y.C., Lewin, S.R., and Kedzierska, K. 2020. Breadth of Concomitant Immune Responses Prior to Patient Recovery: A Case Report of Non-Severe COVID-19. Nature Medicine 26, pg. 453-455.

van Doremalen, N., Morris, D.H., Holbrook, M.G., Gamble, A., Williamson, B.N., Tamin, A., Harcourt, J.L., Thornburg, N.J., Gerber, S.I., Lloyd-Smith, J.O., de Wit, E., Munster, V.J. 2020. Aerosol and Surface Stability of SARS-CoV-2 as Compared with SARS-CoV-1. The New England Journal of Medicine April 15, pg. 1-3.

Van Eeten, M.J.G. 2007. Narrative Policy Analysis. Dalam Frank Fischer, Gerald J. Miller, and Mara S. Sidney (Eds.). Handbook of Public Policy Analysis: Theory, Politics, and Methods. Boca Raton, FL: CRC Press, pg. 251-269.

World Health Organization (WHO). 2020. 2019 Novel Coronavirus (2019-nCoV): Strategic Preparedness and Response Plan. Geneva: World Health Organization.

World Health Organization. 2020a. Novel Coronavirus (2019-nCoV), Situation Report – 1, 21 January 2020. (online) dari: https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200121-sitrep-1-2019-
Agustino and Wicaksana, Policy Analysis of Handling COVID-19: Experience China, South Korea, Italy, and Indonesia

ncov.pdf (accessed: 10 April 2020).

World Health Organization. 2020b. Report of the WHO-China Joint Mission on Coronavirus Disease 2019 (COVID-19), 16-24 February 2020. (Online). Dari: https://www.who.int/docs/default-source/coronaviruse/who-china-joint-mission-on-COVID-19-final-report.pdf (accessed: 10 April 2020).