

# Fighting Flu in Asia: Comparative Study of Response Policies in Yogyakarta, Indonesia and Daegu, South Korea

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**Abstract:** The history of influenza outbreaks extends back to the colonial era. Notably, the 1918 pandemic, often referred to as the Spanish flu, is estimated to have claimed the lives of approximately 100 million people worldwide. In historical development, influenza outbreaks reappeared from 1957 to 2022 in Yogyakarta, Indonesia, Daegu, South Korea, and even the world. This study uses historical research methods to examine policies for handling influenza so people can take preventive measures to prevent it. The Korean and Indonesian sources used include the collections of *Gouvernement Besluit*, *Staatsblad*, *Bijblad*, *Rijksblad*, and contemporary newspapers and the Korean Archives will be accessed through the Korean government's official website, namely, *Guksaphyeonchanwiwonhwe* (National Institute of Korea) as well as the Royal Notes archive: Collection of Joseon Wangjo Sillok, accompanied by primary sources through FGDs and interviews. This paper proves there has been a delay in the response from the Indonesian government to deal with influenza, in contrast to the South Korean government, which is quicker and more responsive in suppressing the bad implications of influenza.

**Abstrak:** Sejarah wabah influenza dimulai pada era kolonial. Khususnya, pandemi tahun 1918, yang sering disebut sebagai flu Spanyol, diperkirakan telah merenggut nyawa sekitar 100 juta orang di seluruh dunia. Dalam perkembangannya, wabah influenza muncul kembali pada tahun 1957 hingga 2022 di Yogyakarta, Indonesia, Daegu, Korea Selatan, bahkan dunia. Penelitian ini menggunakan metode penelitian sejarah untuk mengkaji kebijakan penanganan influenza sehingga masyarakat dapat melakukan tindakan preventif untuk mencegahnya. Sumber Korea dan Indonesia yang digunakan antara lain koleksi *Gouvernement Besluit*, *Staatsblad*, *Bijblad*, *Rijksblad*, dan surat kabar kontemporer serta Arsip Korea akan diakses melalui situs resmi pemerintah Korea yaitu *Guksaphyeonchanwiwonhwe* (National Institute of Korea) serta Royal Arsip: Kumpulan Catatan Joseon Wangjo Sillok disertai narasumber primer melalui FGD dan wawancara. Tulisan ini membuktikan adanya keterlambatan respon pemerintah Indonesia dalam menangani influenza, berbeda dengan pemerintah Korea Selatan yang lebih cepat dan tanggap dalam menekan dampak buruk influenza.

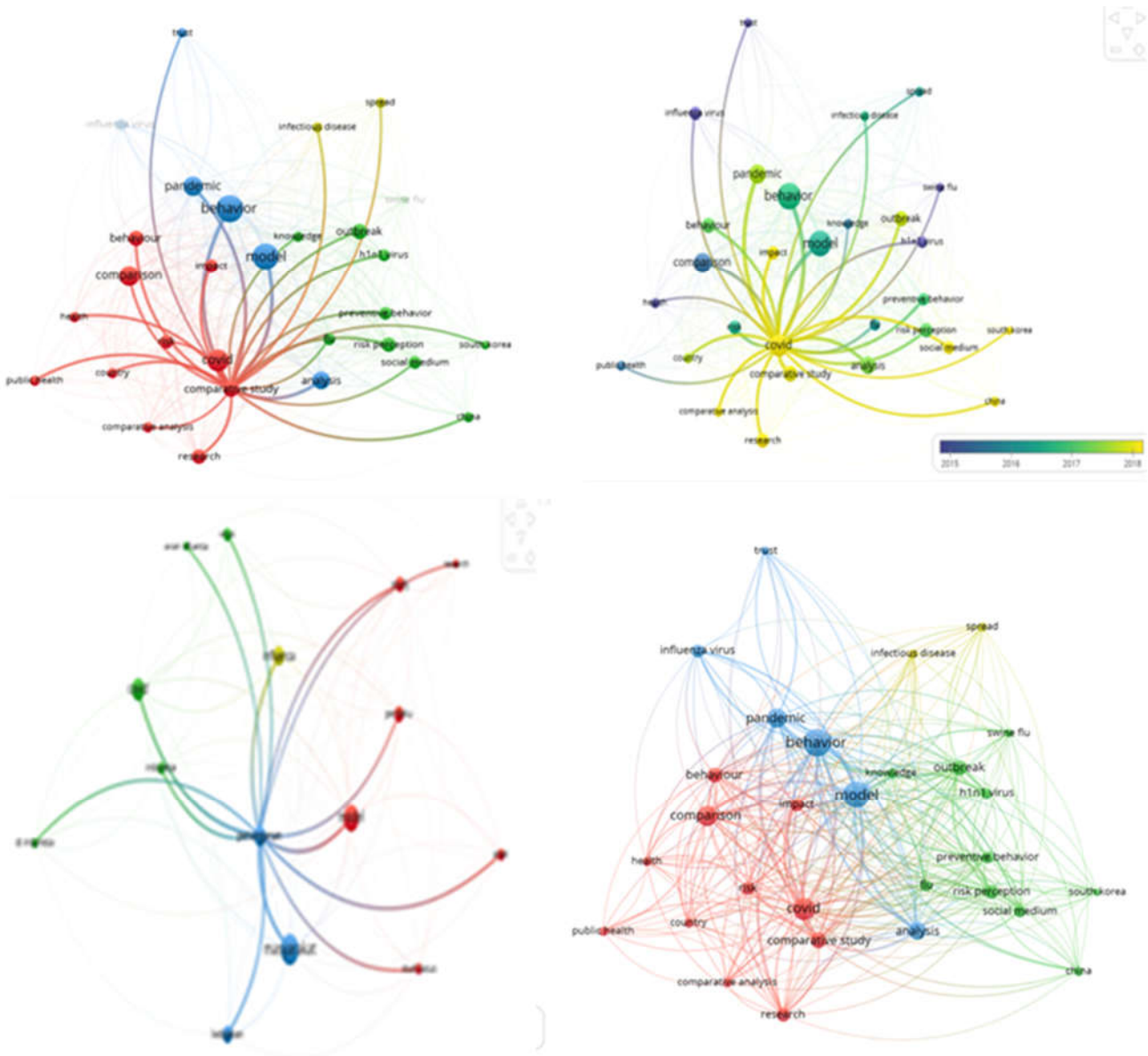
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## INTRODUCTION

The fear of facing an influenza outbreak has persisted throughout the history of the pandemic, including in Indonesia. Influenza disease is one of the biggest causes of death in the population (Agrawal et al., 2021). Influenza pandemics emerged in several phases, first in Russia in 1889, Hong Kong in 1900, Spain in 1918, and Asian Flu in 1957 until the pandemic reappeared with the presence of Coronavirus (COVID-



**Figure 1.** Networks visualization: the relationship between research concepts or keywords with VosViewer mapping

19), which has been deadly and spread rapidly in people all over the world (Tsoucalas et al., 2016; He D et al., 2020).

This condition has resulted in the government issuing policies to deal with influenza with a behavior change model to prevent or cure influenza (Greene et al., 2018). The policy aims to change people's behavior to control the outbreaks effectively. Based on preliminary data, several cities have succeeded in changing people's behavior, including Yogyakarta, Indonesia, and Daegu, South Korea (Yun J et al., 2017; Muhyiddin, 2020). The behavior change model implemented is a method that significantly contributes to dealing with pandemic influenza. As for Daegu, influenza handling has a unique method involving full community participation in dealing with pandemics (Kim HK et al., 2020), including in past vaccination programs (Yun

J et al., 2017).

History records show that several major pandemic events have hit the world. Ravando (2020), in the book *War Against Influenza: Spanish Flu Pandemic in Colonial Indonesia, 1918-1919*, states that the Spanish Flu is estimated to have infected around 500 million people in the world and killed 50 to 100 million of them, including Indonesia as a Dutch colony (Tsoucalas et al., 2016; Ravando, 2020). In 1934, another influenza outbreak was caused by serotype A (H2N2). Later, in 1957, the pandemic broke out again and became known as the Hong Kong Flu or Asian Flu (Wahyutomo, 2011). Several factors contributed to people's poor condition during the pandemic, supported by the lack of environmental hygiene, malnutrition, clean water, and incomplete health services. Such conditions generally occur in poor areas, and transmis-

sion can develop in tourism areas, city centers, and cultural activity centers. This is where Yogyakarta and Daegu have similarities.

Illness condition is multidimensional since it can be caused by social, psychological, cultural, and biological factors (Twaddle et al., 1986). The high cases of illness and death during the 1957 pandemic caused the government to issue a policy to handle it. Government policies include medical treatment, increasing health facilities, and changing people's behavior to be disciplined in maintaining their health.

In order to avoid subjective claims, this state-of-the-art research is also carried out using a biological analysis. Data mining using publish or perish applications. Category used: Google Scholar database, publication range 2010-2021, maximum number of results 500. The search for relevant articles is carried out in 2 stages: (1) keywords in Indonesian and (2) keywords in English. The goal is to obtain a research comparison in domestic and international publications. This can be observed from the results of further mapping by utilizing the Vosviewer application in Figure 1.

The connected lines in Figure 3 show the interrelationship between concepts. Model Policy and handling the influenza virus comparison in South Korea and Indonesia have never been studied. The only comparative studies conducted are in Korea and China (Tang B et al., 2021). However, the focus is on managing the Covid-19 pandemic, not from a historical perspective. Multi-country comparative studies are separated, such as misinformation (Kim HK, 2020), public reactions (Ocal et al., 2020), the effects of policy time lags (Bian Z et al., 2021), the role of transportation during a pandemic (Muley D et al., 2020), differences in risk perception (Ham G et al., 2014), financial sentiment (Valle-Cruz et al., 2021) and the role of trust in science during a pandemic (Dohle S et al., 2020). However, it should be noted that this comparative study was carried out in countries in Europe and America or their comparison with the Asian region (China). Meanwhile, research trends in South Korea still highlight infodemiology (Park HW et al., 2020; Yoo W et al., 2016; Choi DH et al., 2017; Yoo W, 2019; Seo M, 2021) cognitive and emotional dimensions (Oh SH et al., 2015). Studies that mention South Korea are in Muhyidin's research (2020) to obtain an overview of the impact of the pandemic on development planning. The policy model for handling the influenza virus has not been studied in South Korea and Indonesia.

Based on the background, Yogyakarta and

Daegu are two Asian cities that deserve to be studied as references for health policies in dealing with outbreaks. In this regard, the specific objectives of this research are: (1) to analyze the history of health policy in handling the influenza pandemic in Yogyakarta and Daegu (1957-2021); (2) to analyze the impact of health policies on people's behavior in Yogyakarta and Daegu; and (3) to make a comparative analysis of health policy models and their impact on people's behavior in Yogyakarta and Daegu. Influenza management policies must be studied to explain how the government and society handle infectious diseases previously spread in the Yogyakarta and Daegu regions. Overcoming pandemics in the past in Daegu, South Korea, and Yogyakarta from 1957 to 2021 can be an important historical reflection to prepare for the possibilities of future pandemics.

## METHOD

The *Gouvernement Besluit*, *Staatblad*, and *Bijblad* archive collections are used to trace the influenza pandemic areas in Yogyakarta, both those in *gouvernementsland* region and those in *vorstenlanden* region. Contemporary newspapers will be used to find out about the pandemic conditions in Korea, and it is also possible to find out about the pandemic conditions in Yogyakarta. The archive collection will be accessed, among others, through the Library and Archives, DIY Regional Library and Archives Service. Archive collections from the National Archives of the Republic of Indonesia will be used if possible. In addition, contemporary newspapers can be found in several libraries in Jakarta, Solo, and Yogyakarta. In addition, sources can be accessed directly through the official Delpher and Trove sites. Archives concerning Korea will be accessed through the official website of the Korean government, namely, *Guksaphyeonchanwiwonhwe* (National Institute of Korea) and the Royal Notes archive: *Joseon Wangjo Sillokdeung* Collection.

## HEALTH POLICY DURING INFLUENZA PANDEMIC

Epidemics and pandemics have imparted numerous lessons to society, teaching how to achieve freedom from such health crises and foster a healthy social environment for people of all ages. The epidemic in Daegu in 2010-2012 attacked respiratory conditions in children, which later resulted in various variations related to the epidemic, ranging from bronchitis to viruses caused by HEV (human enterovirus) (Lee et al., 2013). This retrospective study was conducted to clarify the regional characteristics of

nontuberculosis mycobacteria (NTM) in Daegu, a metropolitan area in the southern part of South Korea. This retrospective study was conducted to determine the level of NTM nontuberculosis mycobacteria culture of all smear-positive patients increasing every year (류영하, & 신경철, 2018).

Viruses become cases with correlations and relationships since they appear in different years and have different objects; however, they still emphasize cases of flu or influenza. Therefore, many people flock to existing health facilities to treat the flu. Doctor's practice houses and drug houses (pharmacies) in Yogyakarta saw the number of people seeking treatment and those buying influenza medicine and vitamin C (*Pikiran Rakjat*, 1957b). They started from the Asian flu, endemic in Indonesia in May 1957, to August 1958, which engulfed 6 million of the 78 million people in Indonesia (Dunn, 1958, pp. 1140-1144).

From December 2003 to January 2004, it was noted that the H5N1 influenza virus was spreading in Asian regions, such as China, Japan, South Korea, Laos, Thailand, Cambodia, Vietnam, and Indonesia (Alexander, 2007). The first reports of the Asian Flu appeared in February 1957 in the Guizhou region of southwest China. Later, it rapidly spread to various regions, such as Hong Kong in April 1957, the Middle East, Europe, and the coastal cities of the United States (Ardanareswari, 2020). Indonesia seems to have felt the spread of the Asian flu pandemic in various countries. It was recorded that in the last week of April 1957, the first report of an alleged case of Asian Flu appeared in Kalimantan (Dunn, 1958, p. 1141).

Policies for handling influenza in Yogyakarta follow the ones set by the government. This policy aims to eliminate influenza, which has become endemic in Yogyakarta. The policy for handling influenza uses traditional methods and medical treatment.

### Traditional treatment

In dealing with an influenza outbreak, people trust the treatment by consuming "lodeh." It contains seven kinds of vegetables/food ingredients, namely *kluwih* (seeded breadfruit), *gleyor* beans (long beans), eggplant, *mlinjo* peel (*Gnetum gnemon* . L), pumpkin, *so* leaf (*Gnetum gnemon* . L leaf) and *tempeh* (fermented soybean). In health science, no evidence exists that *lodeh* vegetables can cure influenza. Therefore, it is said that the way of thinking of the people of Yogyakarta is unique and mystical (Setiawati, 2020, p. 404). This unique and mystical tradition of thought began to change according to

the times. This is due to the development of modern educational institutions, both public and private schools such as Muhammadiyah, causing people's thinking to develop from a mystical and unique mindset to a more rational one.

Regarding traditional medicine, surely, in Korea, indigenous people, particularly, still use medicine based on healers and traditional doctors (physicians). As was the case during the Spanish flu period, people who still adhered to ethnicity in Korea used superstitions and invisible beliefs to overcome the Spanish flu problem. However, this did not produce a change in a good direction; instead, it claimed many victims. From the Spanish flu pandemic to the epidemic (Chaisung, 2011). However, there is also a traditional Korean medicine called TKM, which has proven beneficial. This traditional medical practice includes activities to prevent and treat influenza transmission through case histories from influenza victims (Shimizu et al., 2011).

### Medical treatment

Medical treatment was carried out to eliminate the influenza that had attacked Yogyakarta people. In order to anticipate the spread of the flu, the Indonesian government has instructed doctors and patients to report immediately if they experience symptoms of this new type of influenza. In addition, the government also hopes for cooperation with the community so that the influenza pandemic can be handled properly and does not cause many fatalities. Later, another government policy to reduce the rate of spread of the flu virus is by implementing mandatory reporting regulations at the local Health Office for people who come or come from areas where the level of influenza virus contamination is relatively high. Besides that, the Indonesian government, through the Minister of Health, Dr. Azis Saleh, also hopes that people do not need to be afraid and panic since the pandemic is being felt in Indonesia and various Asian countries (ILO Handbook, 2009).

In order to confirm the Indonesian government's commitment to overcoming the Asia influenza pandemic, the Presidential Decree of the Republic of Indonesia No. 40 of 1957 and the Decree of the Minister of Defense on 28 May 1957 concerning the deployment of experts and all elements involved in handling this influenza pandemic (*Pikiran Rakjat*, 1957c). In order to support handling the Asian influenza pandemic in Indonesia, the government has also allocated foreign exchange to import necessary medicines (*Algemeen Indisch dagblad de Preangerbode*, 1957).

In Daegu, South Korea, regarding the medical services issues during the COVID-19 pandemic, the local government was very concerned about and fully protected. This can be seen from the formation of the Daegu Medical Association, which implements risk stratification for COVID-19 patients so that patients treated already have categories, making it easier for medical personnel to provide treatment and handling (Choi, 2020). Apart from that, Daegu Medical Treatment also optimizes tools and medical personnel there so that no medical personnel are affected during treatment, and complete medical equipment will also help infected patients recover quickly (Kim et al., 2020).

### **The Modern Way of Treatment**

The drug delivery for salicylpraeparaten, sulfadiazine tablets, acetose, pacheco, sulfaguanidin, acid, salicylamide, Hcl. Codeine, Vitamin C, Multivitamin to Bandung, Semarang, Yogyakarta, Surabaya, Padang, Medan, Banjarmasin, Makassar, Ambon. However, according to the Head of Pharmaceutical Supplies at the Ministry of Health, F. Panggabean, the most appropriate drug for treating influenza was salicylpraeparaten (*Pikiran Rakjat*, 1957d).

### **Health Facilities**

In order to anticipate the increasing cases of Asian influenza in every region, the Ministry of Health instructed to set up emergency polyclinics and alert hospitals in each area to provide treatment and care for residents who were attacked by influenza (*Pikiran Rakjat*, 17 June 1957).

Regarding health facilities, South Korea has several innovations to support handling this pandemic problem. The CTC model was developed as an intermediary between hospitalization and self-isolation at home in South Korea to classify and monitor patients with CTC earlier (Kang et al., 2020). Not only that, concerning health facilities, there are also innovations in the field of tourism. This innovation is due to the existence of a medical tourism destination, Korea, which was chosen as a medical tourism destination due to its success in managing the K-quarantine program. Certainly, this is a breakthrough and an interesting thing in responding to a pandemic by using tourism based on pandemic recovery (Seo & Kim, 2021).

### **Community Awareness and Discipline**

Public awareness is increasing public awareness and discipline to avoid influenza. Therefore, recommendations from the government that is disseminated through newspapers and radio intermediaries

should be obeyed. These recommendations relate to maintaining body strength through regular eating and regular living. In addition, people are also expected to stay away from things that can weaken the body's strength, such as lack of sleep, lack of food, going out at night, and so on (*Pikiran Rakjat*, 1957a).

In Yogyakarta, doctor Sutaryo equates the perception among doctors to treat influenza; every time a patient has symptoms similar to SARS, the hospital goes to the doctor. Sardjito. Furthermore, the medical record installation officer will report the case to the Yogyakarta Health and Social Welfare Office. Thus, in treating patients with symptoms similar to SARS, each hospital must immediately isolate the patient. If the patient cannot handle it, the patient will be referred to Dr. Sardjito General Hospital.

In Korea, rules regarding social distancing and measures to avoid social contact were only introduced during the COVID-19 pandemic; this was aimed at reducing the virus transmission and flattening the pandemic curve (Choe & Lee, 2020). Moreover, the visible difference is in the cooperation carried out by the government and related institutions in South Korea to deal with COVID-19. The success of handling COVID-19 in South Korea is due to the ongoing collaborative governance between the government, private companies, civil society, hospitals and health facilities, and local or customary institutions whose activities include campaigning social restrictions, contact tracing, appointing hospitals and providing complete medical facilities (Choi, 2020). However, there is also the public who avoids health services provided by the government due to the poor track record of these health agencies. This is certainly a special study regarding more structured health promotion in the future (Lee & You, 2021).

### **The Behavior Impact of the People of Daegu and Yogyakarta**

The existence of epidemics and pandemics has changed and also created new faces in Daegu, South Korea. People are now more familiar with using applications as a medium for sending messages without having to meet face to face. However, this is seen as a form of reduced mobility, it can also impact alienation when they have started activities outside the home. This adaptation also occurs in the emergency room at a hospital where, in 2020, the number of patients tends to increase, requiring each hospital to have a fast ambulance, many room services, and the number of children with fever in the

hospital. today (Jang et al., 2021).

Concerning adaption problems such as self-adjustment, the problems of pandemics and epidemics in Daegu attack more on a person's psychological condition, so there are several forms of adaptation as concrete steps to overcome this. It turns out that hospital workers experience high levels of emotional stress during pandemics and epidemics; this is what makes it necessary to have psychological motivation with psychiatric assistance as a form of adaptation for hospital workers (Jo et al., 2020). Similarly, as an adaptation form, there is also a need for psychiatry for children that focuses on mental health support during this pandemic outbreak (Seo et al., 2021). Also, students in Daegu are experiencing difficulties with mental health problems during this pandemic; therefore, they need treatment (Lee et al., 2021). Kang & Kim (2021) states that mental problems occur due to frequent reflection, which puts stress on a person's mental state in Daegu; however, good social adaptation occurs when there is social support to reduce the existing pressure. Furthermore, health workers' psychological and mental conditions are monitored during the pandemic. However, this monitoring is carried out periodically to ensure the mental condition of every medical worker (Shin et al., 2021).

Concerning the adaption issue, it turns out that Daegu has used this as a curriculum for nursing students. As part of future strategies to strengthen disaster response competencies, nursing students using educational programs tailored for unique disaster awareness, developmental studies on simulations to incorporate social responsibility, and correlation studies that consider environmental factors are recommended (Kim & Lee, 2021). The pandemic has also caused adaptation in the economy and business world. During the pandemic, a lot of CSR and stocks later continued to run according to the rhythm, or even sometimes there were social deviations in practice; this also affected the willingness of investors to invest in the South Korean region, particularly during the pandemic (Lee et al., 2022). Thus, the community is also encouraged to understand their health from the start and care concerning the health conditions of each individual (Setiawati, 2021).

Regarding adaptation, surely not only Daegu's people who are making this adjustment, but the Indonesian people are also making various adaptations related to the current pandemic. Adaptation in Indonesian society is not simply individual but collective or communal, supported by solidarity as a form of social adaptation (Minza et al., 2022).

Furthermore, Minza et al. (2022) also explain that a pattern of passive adaptation in Indonesian society is not destructive but constructive, such as the various prayers to support optimism in facing the COVID-19 pandemic. Additionally, adaptation during the pandemic also targeted the country's sports industry.

### **Comparative analysis of health policy models and their impact on people's behavior in Yogyakarta and Daegu.**

Later in the following month, Sumatra and Java also reported findings on Asian flu cases. During the first half of June 1957, the Asian Flu virus broke out in Jakarta (Frederick et al., 1958, p. 1142). Subsequently, in the third week, the Asian Flu virus spread to all areas of the main island, even remote areas. Until the end of June, 6 million cases were reported in Indonesia, with an estimated population of 78,000,000. Next, the number of victims who died as a result of the Asian Flu pandemic in Indonesia was around 43 people (*Leeuwarder Courant hoofdblad van Friesland*, 1957). By late July, influenza was declining throughout the country. However, all areas were not epidemic-free until late August (Dunn, 1958: 1142).

The Asian flu was marked by the beginning of the Asian economy's rise as the sun continued to shine. Clark & Jung (2002) state that the existence of the Asian Flu is also a form of economic crisis, and crony capitalism shows deep social problems.

The influenza disease in Indonesia occurs due to shipping, trade, and educational contacts, which have long been associated with sea and land routes since the 16th century (Boomgard, 1993). Influenza was imported from China, Asia, and Europe, along with maritime expansion in Asia to Indonesia and Yogyakarta.

Hong Kong flu virus (H3N2) pandemic emerged and spread exactly 11 years after the Asian Flu pandemic hit the world in 1957-1958. The Hong Kong Flu virus pandemic became news on 13 July 1968 (Supradewi, 2020, p. 341). At that time, the emergence of this new type of influenza virus was named according to the place of emergence, namely Hong Kong. Compared to other pandemics, the Hong Kong Flu has a relatively low mortality rate with a case-fatality ratio below 0.5%, making it a category-two disease on the Pandemic Severity Index. However, information regarding the number of victims who died from the Hong Kong Flu is not known.

Even though there were not many victims, Hong Kong flu also received special attention from

the South Korean government. Vaccination is applied to urban and rural areas with attention to chronic patients aged 50-64 years who are recommended subjects who are at high risk of a similar pandemic (Byeon et al., 2018).

Since 1 April 2003, Indonesia has declared SARS an outbreak threat that could occur anytime. The Indonesian government issued a Decree of the Minister of Health of the Republic of Indonesia No. 424/MENKES/SK/IV/2003, which took effect on 3 April 2003 as a preventive step against the threat of the SARS outbreak. Therefore, the Indonesian government supervises traffic access on various land, sea, and air routes.

In contrast to Indonesia, which swallowed human patients related to Sars-Cov, in Korea, there were interesting incidents related to the Sars-Cov epidemic. Sars-Cov infection was found in stray dogs roaming in rural indigenous communities (Zambrano-Mila et al., 2022). Therefore, the government is prioritizing and looking back at the local conditions that led to the transmission of Sars-Cov to the wider metropolitan areas in South Korea; with this local-based policy, it is hoped that this will become a form of local identification of a more widespread Sars-Cov specific (Im & Kim, 2021). In addition, schools are also a means of spreading SARS-COV in Korea, with a high risk of causing community transmission at schools (Choe et al., 2022). Interestingly, with several victims due to Sars-Cov in South Korea, it turns out that the form of medicine and patient visits that are mostly due to Sars-Cov are regarding mental health and psychiatry as a form of pandemic and the initial epidemic of Sars-Cov (Kim et al., 2022).

Bird Flu appeared in Asia and became the most widespread and long-lasting disease along with SARS (severe acute respiratory syndrome). This is what is feared will become a problem for global health. Indeed, at first, Avian Influenza only caused death in poultry, but direct contact with infected birds can also cause death in humans (Tahira et al., 2022).

Cases of bird flu in Indonesia first appeared in 2003 after many birds in Indonesia began to die suddenly. The cause is thought to have originated from the migration of poultry from Indonesia and poultry from other countries that happened to cross (Setiansyah, 2018, p. 161).

Bird flu in Korea has claimed many victims, including the community's social life. According to Seo & Kim (2004), several hundred markets spread across eight provinces during the Avian Influenza emergency period in Korea, which became the place

of transaction. An important note in Korea is that chickens mostly transmit the bird flu, although birds are also poultry that transmit influenza outbreaks (Seo & Kim, 2004). However, some studies also state that the main cause of bird flu in Korea is the live birds (Kim et al., 2006).

There are several vaccine trials in Korea to overcome the avian influenza problem, one of which is the AI vaccine to prevent the transmission of avian influenza (bird flu). According to Lee & Song (2013), there are renewable vaccines with several supporting technologies in Korea, with the AI vaccine also being an integrated strategy for controlling and securing poultry on farms and agriculture in the community. In addition, the Korean government also implemented a livestock vehicle registration system in August 2012. This program will prevent the spread of the bird flu virus, particularly coupled with urbanization. The population in villages is decreasing, but there are more farms and farms. The increasingly dense farmland causes the risk of bird flu spreading in rural areas, and it may spread to other villages (An et al., 2021).

The spread of influenza A H1N1 virus or swine flu (swine flu) in Indonesia was first noticed at the end of June 2009. At that time, two patients were declared infected with influenza A H1N1 virus, and the two patients were treated at RSPI Sulianti Suroso and Sanglah Denpasar Bali ("Flu Babi, Virus Paling Heboh di 2009," 2009). A Tempo report on 11 August 2009 stated that cases of swine flu in Indonesia reached 812 people, consisting of 456 men and 356 women. Later, of the number of victims who died due to the influenza A H1N1 pandemic, there were three people (Swamurti, 2009).

At the time, news appeared that the influenza A H1N1 virus could threaten the tourist world in Yogyakarta ("Flu Babi Ancam Dunia Pariwisata di Yogyakarta," 2009). Initial reports concerning swine flu in Yogyakarta appeared for the first time on 9 July 2009, originating from a student who had just attended a student exchange in California, United States of America. This student also had contact with paramedics at a hospital in Sleman, causing both of them to undergo treatment in the isolation room of RSU Dr. Sardjito. Several farms in rural Korea were identified as having pigs infected with zoonoses in pigs these viruses can be transmitted at any time (Lee et al., 2012).

Even though the Mers has taken the Middle East by storm as a new form of epidemic and pandemic, it has also occurred in Korea, and several ways of handling it in rural areas in Korea. Interestingly, Korea's Mers quarantine and isolation pro-



cess is centered on the area where they live. The city accommodates many people since this virus is transmitted through hospitals in these cities, unlike rural areas, which host a small number of Mers patients. It can be said very little due to villages being far from as extensive mobility as cities (Lee & Cho, 2017).

The Covid-19 pandemic was first discovered in Wuhan and has spread worldwide since early 2020. Before this virus spread, the World Health Agency (WHO) reported many cases of pneumonia in Wuhan in December 2019. Chinese health authorities later named this new Corona Virus Disease-19 shortened to COVID-19. Meanwhile, at the start of this pandemic, Indonesia was still focused on evacuating and quarantining its citizens arriving from China (Yulisman, 2020).

Yogyakarta is one of the regions in Indonesia that has experienced the spread of the Covid-19 virus. Based on data compiled by DIY Health Service, the total number of positive patients on 24 March 2020 was five people. In the latest developments, on 30 April 2020, the number continued to increase to 668 patients in care (PDP), 3,720 people in (ODP), 69 positive patients, and seven people died (Tribunjogja.com, Monday, 20 April 2020). Since mid-2020, confirmed cases have continued to increase, causing the Indonesian government to impose a total lockdown scheme or lockdown in areas with a high spread rate.

The COVID-19 pandemic in South Korea started with transmission through public worship places, which later spread to all forms of activity for the South Korean people, including the social, economic, and cultural activities of the people there. Certainly, this is a new form of living the lives of the residents there, including in rural areas in Korea, during the COVID-19 emergency period. Kim et al. (2021) stated that there is a social prescribing program that helps people, particularly the elderly in villages, to reduce the impact of loneliness and depression in rural areas due to this pandemic. First, this social prescribing program is an appropriate health promotion program for rural areas that involves community social participation. villages, the two social prescriptions are also integrative programs that involve human resources in these villages, and these three social prescriptions are an alternative for elderly people in rural areas who often withdraw from social participation so that they are not depressed with increasingly lonely conditions in rural areas due to the pandemic COVID-19. Thus, the COVID-19 pandemic has also impacted the marginalized and rural population, which is auto-

matically negatively affected by this pandemic (Singh et al., 2022).

### **The Behavior Adaptation of the People of Daegu and Yogyakarta**

This research shows that there are comparisons in the form of behavior in response to health policies related to handling COVID-19. Even though they are in the same region, namely Asia, the characteristics of each individual are different.

The existence of epidemics and pandemics has changed and also created new faces in Daegu, South Korea. People are now more familiar with using applications as a medium for sending messages without having to meet face to face. However, this is seen as a form of reduced mobility, and it can also impact alienation when they have started activities outside the home. This adaptation also occurs in the emergency room at a hospital where, in 2020, the number of patients tends to increase, requiring each hospital to have a fast ambulance, many room services, and the number of children with fever in the hospital. today (Jang et al., 2021).

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Concerning the adaption issue, it turns out that Daegu has used this as a curriculum for nursing students. As part of future strategies to strengthen disaster response competencies, nursing students using educational programs tailored for



unique disaster awareness, developmental studies on simulations to incorporate social responsibility, and correlation studies that consider environmental factors are recommended (Kim & Lee, 2021). The pandemic has also caused adaptation in the economy and business world. During the pandemic, a lot of CSR and stocks later continued to run according to the rhythm, or even sometimes there were social deviations in practice; this also affected the willingness of investors to invest in the South Korean region, particularly during the pandemic (Lee et al., 2022). Thus, the community is also encouraged to understand their health from the start and care concerning the health conditions of each individual (Setiawati, 2021).

Regarding adaptation, surely not only Daegu's people who are making this adjustment, but the Indonesian people are also making various adaptations related to the current pandemic. Adaptation in Indonesian society is not simply individual but collective or communal, supported by solidarity as a form of social adaptation (Minza et al., 2022). Furthermore, Minza et al. (2022) also explain that a pattern of passive adaptation in Indonesian society is not destructive but constructive, such as the various prayers to support optimism in facing the COVID-19 pandemic. Additionally, adaptation during the pandemic also targeted the country's sports industry.

Policies for handling influenza in Yogyakarta follow the ones set by the government. This policy aims to eliminate influenza, which has become endemic in Yogyakarta. The policy for handling influenza uses traditional methods and medical treatment.

## CONCLUSION

In every pandemic that involves many people and social aspects related to it, several strategies will certainly be created; various adaptations will be created so that new forms of life categorization will emerge due to the epidemic response. Certainly, the response in one region will also differ from others due to differences in characteristics and the extent to which the outbreak has impacted the environment. Looking at the outbreak will bring up policy issues later issued by local policyholders to deal with the problem.

Government policies have been regulating the public to maintain their health from time to time, particularly regarding the Influenza virus, bearing in mind that the virus becomes more virulent as time progresses. National-scale policies will later be disseminated to the village government as a

government structure prior to the community, particularly village communities. So, community policies in rural areas in responding to the influenza outbreak between Daegu and Yogyakarta are also an interesting study that does not only discuss viruses at the macro level but also the lowest level, namely the village community. What we all know is that rural communities have more complex social resilience than urban communities, and there are also many traditional technologies to fight influenza pandemics in people living in rural areas.

This study's conclusion is important because there are clear differences in handling influenza outbreaks in Daegu and Yogyakarta. In Indonesia, there tends to be a delay in the government's response to dealing with influenza; this can be seen from the number of victims who fell a lot in the early stages of the spread of each existing influenza outbreak. This is in contrast to the South Korean government, which is quicker and more responsive in suppressing the adverse implications of influenza, which can be seen by eliminating congregations from a place of worship, which is the center of the spread of influenza outbreaks, to the existence of several restrictions on activities involving large numbers of people.

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