

COVID-19 pandemic in Southeast Asia: intervention and mitigation efforts

Muhammad Ashraf Fauzi

Faculty of Industrial Management, Universiti Malaysia Pahang, Kuantan, Malaysia, and

Norazha Paiman

Centre for Liberal Studies, Universiti Kebangsaan Malaysia, Bangi, Malaysia

Abstract

Purpose – Coronavirus disease 2019 (COVID-19) has sent shockwaves throughout the world in less than two months. Countries in South East Asia are not spared in this plight. As the disease can be transmitted from human to human, extensive control and mitigation efforts have been taken by almost every country where the disease has been reported. Southeast Asian countries or the Association of Southeast Asian Nations (ASEAN), being one of the closest regions with China, have taken various measures to slow down and contain the spread of the pandemic virus.

Design/methodology/approach – Multiple strategies have been taken by the government to reduce the number of infections in the region. This includes phases of lockdowns in affected areas and federal order to close businesses to reduce the rate of infection among the people. As ASEAN comprises diverse cultures, socioeconomic backgrounds and geographical differences, steps taken are definitely based on what are deemed important and applicable to each country.

Findings – This paper reviews what has been taken by each of the ASEAN members and further recommendations that can be taken to ensure the issue of human security in the region can be preserved.

Originality/value – The originality of this paper is to show mitigation and prevention strategies undertaken by ASEAN nation in combating COVID-19.

Keywords ASEAN, COVID-19, Coronavirus, Southeast Asia, ASEAN-5

Paper type General review

Introduction

The epicenter of the new coronavirus disease 2019 (COVID-19) was originated in China. The first 27 cases of upper respiratory or pneumonia cases were reported on December 31, 2019 in Wuhan city located in the province of Hubei, China (Xu *et al.*, 2020; Sohrabi *et al.*, 2020; Zhu *et al.*, 2020; Tan *et al.*, 2020). Wuhan is one of the densest cities in China with a population of more than 11 million people. All of the cases were traced back to the city Seafood Wholesale market in Huanan which sold a variety of live animal species comprising poultry, snakes, bats and marmots (Lu *et al.*, 2020). This was the first wave of COVID-19 that shook the world and affected many countries in its wake. Due to the morphology and characteristics of the virus that is zoonotic in nature (infectious and caused by a pathogen transmitted from nonhuman to human transmission), the coronavirus was linked to the city's Huanan Seafood Market in which the prevalent human-to-human contagion has resulted in 73,451 cases in 26 countries with 1,875 deaths as of February 18, 2020 (Chan *et al.*, 2020).

The World Health Organization (WHO) has declared a new terminology for the new coronavirus epidemic disease as 2019-nCoV, that is COVID-19 (Lai *et al.*, 2020). The virus itself has been renamed from 2019-nCoV to severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) (Gorbalenya *et al.*, 2020). COVID-19 has successfully made its transition to human from animals in the Huanan seafood market (Velavan and Meyer, 2020). It is a deadly



respiratory flu infectious disease that causes 2% fatality rate at this point of time (Xu *et al.*, 2020). Studies have shown that COVID-19 can be transmitted from human-to-human transmission with the incubation period is believed to be within 14 days (Li *et al.*, 2020; Wang *et al.*, 2020). The outbreak is declared as a global pandemic by WHO after a human-to-human transmission is spreading fast like wildfire with a high reproduction number of R_0 (a measurement of how many people one human can transmit to other human beings after being infected). There are reports that signify the R_0 to be between 2.24 and 3.58 (Rothan and Byrareddy, 2020).

In the early reported stage, COVID-19 symptom is essentially construed as a pneumonia. Recent data show that gastrointestinal and asymptomatic infections are prevalent, particularly among children (Chan *et al.*, 2020). Clinical evidence of COVID-19 starts to show signs within a week, usually presented with fever, nasal congestion, cough and other infections related to upper respiratory tract. The most vulnerable patients are those above 60 years and immunocompromised, with a higher risk posed than children with milder symptoms (Li *et al.*, 2020). Due to its infectious and dynamic behavior, an incubation period of 3–24 days is needed for the virus to develop new genomic features in a new host (Guan *et al.*, 2020). A mean incubation period of five days and a median of three days has been documented. COVID-19 is typically fatal to senior citizen and those who have existing chronic illnesses and immunodeficiencies (Minh Duc *et al.*, 2020). The most common symptom of COVID-19 is fever and cough. From computed tomography images of a patient's chest, it was shown that an image of ground-glass opacity was captured from the computerized system (Lai *et al.*, 2020).

Understanding the basis of COVID-19 from healthcare perspectives, it would provide the fundamental understanding of how Association of Southeast Asian Nations (ASEAN) countries deal with and overcome the spread of the disease. As COVID-19 has shown to be in multiple forms of gene, the crucial aspect of mitigation efforts from past histories across borders would help researchers, medical practitioners and policymakers to plan in detail on how to control the spread of the virus with respect to different forms of COVID-19 genetic variations. Information such as symptoms, incubation period and even tourist traveling history would contribute to the body of knowledge in ASEAN in order to combat COVID-19 until the virus is extirpated.

From time immemorial, an epidemiology had shown that infectious disease affecting nation-states through cross border had piqued interests among scholars on the issue of human security (Curley and Thomas, 2004). COVID-19 pandemic that has spread from China to ASEAN countries in a matter of months since its outbreak has raised serious concern on how the region deals with pandemic. Challenges and barriers due to differences in the economic, social and demographic aspects have made it more challenging for ASEAN to get through this critical phase. The following paragraph reviews the current mitigation steps that have been taken by the ASEAN countries in combating COVID-19. These interventions would provide the means of knowledge sharing within the region that would help each country to develop strategies suited and applicable based on each country's context (Fauzi *et al.*, 2019).

COVID-19 in ASEAN

ASEAN composed of 10 countries. The ASEAN is the seventh-largest world's economic superpower and the third in Asia with a combined GDP of US\$2.6tn (World Economic Forum, WEF, 2016). Among the ASEAN countries, the ASEAN-5 are the countries that have the strongest GDP growth and are seen as having stronger economic activities (Singapore, Indonesia, Malaysia, Thailand and Brunei) (Munir *et al.*, 2020). The impact of COVID-19 on this region has had a direct effect on its economy. The diversity of ASEAN countries has posed serious issues of human security on a massive scale, resulting in a rather dismaying

state of economic seesaw at the moment, and if no rigorous actions are taken to combat the contagion, the whole region may collapse to the ground.

COVID-19 has brought disturbance to the economy as business and day-to-day activities have come to a halt. People are ordered to stay inside and practice social distancing when going out to get their essentials. In terms of cost of living and wages, there is a noticeably stark disparity between Laos and Singapore that ranges from US\$119 to US\$3,547 per month, respectively (Malik *et al.*, 2018). This alone shows that the socioeconomic difference among the ASEAN citizens requires a thorough fiscal measure in curbing the disease as the people's acceptance on economic disturbance is greatly dependent on the social and economic aspects within members of ASEAN.

The diversity among the ASEAN countries in terms of political and sociocultural differences are pertinent in the way that each country addresses certain issues at hand (Malik *et al.*, 2018). The issue of foreign workers and migration on the imported cases in ASEAN region is a prevailing issue especially in Singapore (Pung *et al.*, 2020). These countries can be categorized as sending countries (Laos, Indonesia, Cambodia, Philippines and Myanmar) and receiving countries (Singapore, Malaysia, Thailand and Brunei).

Drawing on the current cases of COVID-19 pandemic that is progressively multiplying day by day, this article seeks to analyse the prevention and mitigation strategies taken by the ASEAN members to combat COVID-19 pandemic. The strategies in controlling the disease has urged every government to focus on this crisis from the lens of the public health that pertains to the issue of the threat on national boundaries within neighboring states.

Singapore and Vietnam have muddled through the COVID-19 pandemic by enforcing several preventive and containment measures such as using test, track and trace method (OECD, 2020). These methods have served as guidance to other countries in the region generally, and worldwide in particular. Malaysia and Thailand have increased their border controls as one of the main preventive measures in controlling the spread of the pandemic. Repatriates such as migrant workers would enable the easy spread of COVID-19 as some of the migrants enter the countries illegally.

Singapore

The first known case in SEA was reported on February 1, 2020 in Singapore on January 23, 2020. Singapore has identified its first three local clusters of COVID-19:

- (1) Tour group from China;
- (2) Conference held by a company and
- (3) Church gathering (Pung *et al.*, 2020). Singapore since then carried out a stringent test of suspected cases and tracked down close contact to every confirmed case from the first entrance at the airport and every door into the country. The country even strictly home-quarantined and confined the close contacts until they were absolutely cleared of the disease. What had been done by Singapore was called an all-of-government good example approach by Tedros Adhanom Ghebreyesus, the WHO chief.

Despite battling COVID-19 earlier than other ASEAN members, recent data show that Singapore had a sudden surge of new cases due to migration workers' accommodation. This has led the government to impose a national partial lockdown on April 7. The law prohibits individuals to leave houses unless a definite need arises. Fine can be charged up to S\$10,000 and/or prison up to six months (Jones, 2020). The country's reliance on migrant workers in construction, shipping and maintenance has opened the door for exponential cases of COVID-19 due to impossible social distancing measure as these migrants are placed in dormitories which make social distancing almost impossible.

Singapore's Finance Minister Heng Swee Keat has revealed short-term corporate tax rebates, including a number of other fiscal injections for businesses and the GST as well as measures to alleviate the economic impact of COVID-19 (Haines, 2020). The country has also announced the third stimulus package in two months, withdrawing its deep sovereign reserves to capitalize new fiscal measures amounting to S\$5.1bn (US\$3.55bn), combined with S\$6.4bn (US\$4.4bn) worth of measures announced in February and a S\$48.4bn (US\$33.7bn) package released on March 26. Taken together, the Prime Minister Lee Hsien Loong's government has now injected a fiscal measure worth S\$59.9bn (US\$42bn) – equivalent to 12% of GDP – to battle the COVID-19 pandemic in the republic (Sim, 2020). This stimulus package was intended to tide over businesses in particular and the Singaporeans in general through a month-long partial lockdown to decrease a rise in COVID-19 cases. As of now, Singapore is leading among the ASEAN members with the highest number of COVID-19 cases, superseding Indonesia and Philippines by leaps and bounds.

Indonesia

Indonesia is probably the most affected country hit by COVID-19 due to lack of resources and a heavily indebted poor population. In March 24, President Joko Widodo insisted that the country would not implement a lockdown (The Jakarta Post, 2020). This indicates a bad decision as Indonesia currently has one of the highest fatality rates of COVID-19 in the world. Since then, Indonesia had implemented a partial lockdown on April 10. The lockdown was mandated by Article 10 of the 2018 Law on Health Quarantine. The law serves as the basis for government to impose lockdowns on states plagued by disease outbreaks.

The country has announced a stimulus package of US\$8.725bn on March 13, 2020 to ease the economic losses (Jennings, 2020). This is the second package announced by the Indonesian government. The first was in February worth US\$725 in providing fiscal support to the country's tourism sector in particular with other important industries such as aviation and property. Low-income household was allocated a total of US\$324m (Medina, 2020a March 18). Indonesia has set up a task force for COVID-19 (Gugus Tugas Percepatan Penanganan COVID-19) as a national task force to combat COVID-19 (Djalante *et al.* 2020a). This task force is led by General Doni Monardo, Chief of the National Disaster Management Agency (BNPB).

Malaysia

Malaysia imposed a curfew known as “movement control order” (MCO) starting from March 18, 2020. It was implemented by phases and extended over two weeks gradually from March 18 to 31, 2020 (phase 1), April 1 to April 14 (phase 2) and April 15 to April 28 (phase 3). The Prime Minister, Muhyiddin Yassin was quoted as saying that the gradual extension was in a way to provide space for healthcare workers to combat the disease and to prevent it from spreading to the mass public. The law had been implemented by imposing fine and jail time to the perpetrators that violate the movement control order. In terms of supporting the fiscal economy, Malaysia has provided three stimulus packages to support the country's economic impact of COVID-19. The first package was US\$4.8bn, the second package was US\$57bn and the third package focusing on providing support for small- and medium-size enterprises (SMEs) business valued at US\$1bn (Medina, 2020b April 7).

Thailand

Thailand had declared a state of emergency on March 26. The country implemented a partial lockdown in Bangkok and cities in the immediate vicinity. The government made a stimulus package of 1.9tn baht (US\$58bn) at an estimated of 10% of the country's GDP. It was meant to support the industry's and people's soft loan and to provide safety net for corporate bonds (Thongnoi, 2020). The country is predicting into economic recession and the package was designed to provide such relief measures in reducing the impact of economy.

Philippines

Rodrigue Duterte, the president of Philippine has imposed home quarantine to the island of Luzon, the location of the country’s capital city Manila. The quarantine started on March 16 until end of April affecting half of the country’s population of 101 million people (Yen, April 8). The country has developed a family-focused care plan intended to provide psychological support to its people in mitigating COVID-19 (Cruz *et al.*, 2020). The plan consists of providing facilities for isolation in the event that family members were diagnosed with COVID-19. This also includes identifying senior citizen aged more than 60 years’ that are at risk if contracting the disease. This plan serves as a holistic measure to serve as a social capital for the people of Philippine on the operational measures.

Vietnam, Brunei, Cambodia, Laos and Myanmar

The other remaining five ASEAN countries have relatively small cases as of April 18, 2020. This is probably due to its economic activities that are seen much smaller than the ASEAN-5 (Munir *et al.*, 2020). Despite this, these countries have taken necessary measures in combating COVID-19.

The first case reported in Vietnam on January 22, 2020 was a 65 years’ old Chinese man suffering from mild fever and exhaustion. He has precondition health problems of a type-2 diabetes and a coronary heart disease (Phan *et al.*, 2020). At the same time – almost concurrently – on January 23, a Vietnamese woman returned to Vietnam from Wuhan on a business trip was diagnosed with a pneumonia-like illness (Giang *et al.*, 2020). Vietnam has announced VND180tn (US\$ 7.7bn) fiscal measures to help the people, businesses and households affected by the COVID-19 pandemic (IMF, 2020). Brunei had implemented massive tests since January 2020 and had imposed travel bans in and out of the country since March 15 (Djalante *et al.*, 2020b). All Bruneians returning from abroad have to go through a compulsory isolation in quarantine facilities provided nationwide.

Myanmar reported its first case on March 23. The government has announced US\$71.6m to support loans, easing deadlines for tax payments and also tax exemptions for local business (Oxford Business Group, 2020, March 31). While the other remaining three ASEAN members have announced certain budgets in helping the economy; Brunei has announced stimulus package of BND 250m (US\$176.26m); Cambodia with US\$70m; and Laos with 10bn kip (US\$1.12m) (IMF, 2020).

Statistics in ASEAN

In comparison, ASEAN countries have adapted different steps in combating COVID-19. This has led to a different number of cases as shown in Table 1. On 22 March, Malaysia was

Table 1.
Comparison
cumulative number of
cases and deaths on
March 22, 2020 vs
April 22, 2020 vs May
22, 2020

Country	March 22, 2020			April 22, 2020			May 22, 2020		
	Cases	Death	Rank	Cases	Death	Rank	Cases	Death	Rank
Malaysia	1,306	10	1	5,532	93	4	7,059	114	4
Thailand	599	1	2	2,826	49	5	3,037	56	5
Indonesia	514	48	3	7,418	635	2	20,162	1,278	2
Singapore	432	2	4	10,141	11	1	29,812	23	1
Philippines	380	25	5	6,710	446	3	13,434	846	3
Vietnam	99	0	6	268	0	6	324	0	6
Brunei	83	0	7	138	1	7	141	1	8
Cambodia	53	0	8	122	0	8	123	0	9
Laos	0	0	9	19	0	10	19	0	10
Myanmar	0	0	10	121	5	9	199	6	7

leading the chart with 1,306 cases and 10 fatalities. Nearly a month later, the number of cases in Malaysia has increased but within ASEAN countries, Malaysia falls to number four. An alarming and worrying trend is seen in Indonesia, with its increasing trend, issue of under reported cases due to low mass testing on its people would be a serious problem for the republic. Even more, the number of deaths is also high with 535, increasing more than 11-fold than the previous month. Other ASEAN countries (Vietnam, Brunei, Cambodia, Laos and Myanmar) are looking to keep the disease under control with low cases and number of deaths as long as the issue of under reported of cases due to low testing facility are not a matter of concern.

The ASEAN-5 is shown to be severely affected by the pandemic as compared to others as its economic and business activities are the most active (Munir *et al.*, 2020). Lockdown measures have directly impacted ASEAN-5 countries on businesses and economy in every segment. Certain industries are severely affected such as hospitality and tourism, transportation and entertainment. As business activities in five countries (Vietnam, Brunei, Cambodia, Laos and Myanmar) are not as extensive than the other considerably active countries, the spread of the disease is much slower. Table 1 illustrate the number of cases and death from March to May on the 22nd day of each month.

Implication

This paper provides a simple yet critical review on the mitigation efforts undertaken by the ASEAN countries. Being one of the promising regions in the world with a relatively high population, the ability to counter COVID-19 outbreak serves as the blueprint for pandemic control to most other developing countries worldwide. In practice, certain measures taken are seen to be more effective than others such as the phases taken by Malaysia to dampen the shock that might be felt by the people through stages of movement restriction order (MRO). Massive tests undertaken by Singapore to retract possible infection among its people particularly those arriving from overseas and bordering countries has shown to Singapore high detection number. To date, more than 30,000 cases involving foreign workers.

ASEAN countries should activate its information and knowledge sharing platform by using integrated platform that can be utilized from government to government platform. This platform can be in the form of virtual database that can be accessed and updated in real-time by the people within ASEAN. Strengthening the virtual communities' platform will serve as powerful tools for citizen in acquiring first-hand information (Fauzi, 2019). As businesses and daily operations are expected to operate even though COVID-19 will not be entirely eradicated, this information sharing tool is expected to play an important role in determining the sustainability of the region's socioeconomic activities.

Conclusion

A rigorous monitoring to track the virus and how its adaptation, pathogenicity, transmissibility and evolution should be done rigorously (Sohrabi *et al.*, 2020). In the meantime, while the scientists find the cure in vaccination, the immediate step to be taken has been done by every government in the region. Economically speaking, every ASEAN country has presented suitable stimulus package that would help to support local businesses as well as determine the sustainability of the region's economy. The containment of COVID-19 is the number one priority for all ASEAN members. A drastic short-term containment cost should be implemented even though it will falter the economic growth. These containment costs should cover all aspects in term of health, economy and society's well-being. Some countries have stressed their budget by spending more than expected and some have projected a deficit in 2020s fiscal policy in spending to counter COVID-19 which involved purchasing extra

medical equipment's from neighboring countries and pumping monetary assistance to local small and medium enterprises (SMEs). Health issues also pose economic concerns that need to be addressed considerably. Taking care of the health issue nationwide will ensure that everyday businesses will be back to normal. Economic growth will be self-sustaining as long as the fundamental issue of human security is well safeguarded. One pressing issue that needs to be addressed is the number that is rising steeply, particularly in some of the countries that have reached and may soon reach 30,000 cases, such as Indonesia and Philippines as these two countries have a high population and lack of proper health facilities to adequately cater to all its people. While Singapore has also reached 30,000 cases, the country would be expected to control the disease due to its efficient facilities and it is a relatively small country that can enable its operational plan to control COVID-19. Before the vaccine against COVID-19 is made available, suppressing this outbreak and making sure the contagion stops to rise, will present government a safe growth in ASEAN members for a stable development in the short- and long-term future.

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Corresponding author

Muhammad Ashraf Fauzi can be contacted at: ashrafauzi@ump.edu.my

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