


The socio-economic effects of covid-19


Os efeitos socioeconômicos da covid-19

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Abstract

The covid-19 epidemic has spread rapidly all around the world since December 8, 2019, from China, the world's largest exporter of goods. The outbreak quickly spread throughout the countries, affecting the health sector, and causing economic, environmental, and social challenges. Therefore, the article discusses the impacts of covid-19, to provide a better understanding to the public and the researchers regarding its impact on the society, education, communication, and economy of infected countries. The study followed a qualitative case study approach, including literature review and document analysis. The review was done on a wide range of data sources including journal articles, books, government documents, newspaper articles, and policy reports. The covid-19 is rigorously disrupting the global economy and almost all countries are trying to slow down the spread of the disease by increasing the testing, facilitating treatments of infected patients, quarantining suspected cases via contact networks, implementing social distancing by restricting large gatherings, maintaining countrywide or partial lock down, and etc. However, these aspects are highly challenging to the maintenance of the society's daily life and addressing difficulties raised by the public to implement correct strategies to face the pandemic situations globally is necessary.

Keywords: Covid-19, Social responsibilities, Health, Economic, Education

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Resumo

A epidemia de covid-19 espalhou-se rapidamente por todo o mundo desde 8 de dezembro de 2019, a partir de China, o maior exportador mundial de commodities. O surto espalhou-se rapidamente pelos países, afetando o setor de saúde e resultando em desafios econômicos, ambientais e sociais. Dessa forma, o artigo discute os impactos da covid-19, para fornecer ao público e aos pesquisadores um melhor entendimento dos seus impactos na sociedade, na educação, na comunicação e na economia dos países infectados. O estudo seguiu uma abordagem de estudo de caso qualitativo, incluindo revisão de literatura e análise documental. A revisão foi realizada a partir de uma larga gama de fontes de dados incluindo artigos de revistas, livros, documentos governamentais, artigos de jornal e relatórios de políticas. A covid-19 está rigorosamente impactando a economia e quase todos os países estão tentando diminuir o avanço da doença aumentando a quantidade de testes, facilitando o tratamento de pessoas infectadas, quarentenando casos suspeitos pela rede de contatos, implementando distanciamento social ao restringir grandes aglomerações, mantendo *lockdown* total ou parcial e etc. Entretanto, esses aspectos causam grandes problemas para a manutenção da vida diária da sociedade e é necessário lidar com as dificuldades levantadas pelo público para implementar estratégias corretas para enfrentar situações de pandemia globalmente. **Palavras-chave:** Covid-19, Responsabilidades sociais, Saúde, Economia, Educação

Introduction

Despite significant advances in medicine over the last centuries, infectious diseases still represent significant threats to modern societies. Around 60% of emerging infectious diseases reported globally are zoonoses, and virus outbreaks may result in considerable costs to a country's trade and agriculture (Delivorias; Scholz, 2020). The worldwide epidemic of coronavirus disease 2019 (covid-19) has spread rapidly all around the world since December 8, 2019. China (Paules; Marston; Fauci, 2020), which is the third highest manufacturing country globally and the world's largest exporter of goods, has a large animal market in central Wuhan that was linked to most of the early cases recorded (Li, Q. et al., 2020). Coronaviruses (CoV) are a large Coronaviridae family of viruses that cause illnesses ranging from the common cold to more severe respiratory diseases such as Middle East respiratory syndrome (MERS-CoV) and severe acute respiratory syndrome (SARS-CoV) (WHO, 2020a). The outbreak of Coronavirus from China to more than 200 countries has shocked the international societies and specially health policy makers around the world. Therefore, many social and economic issues are raised throughout the world. Despite the low percentage of Coronavirus mortality rate, the shock was wider and stronger than that of the severe acute respiratory syndrome (SARS), the bird flu, and the swine flu in the past few years (Sadati; Lankarani; Lankarani, 2020). Many studies focusing on this aspect of the pandemics impact have found that the effects across the global economy can be significant (Delivorias; Scholz, 2020). However, this particular outbreak revealed how a biological and epidemiological issue can severely affect social, economic, and political subjects. Due to weak health facilities and the lack of resources in some countries, tough policies were necessary to control the spread of the covid-19 epidemic. Except for a few essential services, the economic activities are entirely shut down, distribution of goods and services are limited, and travels are banned. Furthermore, production stopped in the main affected cities and global supply chains have been disrupted in many countries. However, the policy measures taken by the

relevant authorities regarding physical distancing and lockdown were supported to save people’s lives throughout fighting the spread of the coronavirus but these measures have affected the lives and livelihoods of millions of people around the world. Therefore, this article discusses the covid-19 impacts in the year 2020 worldwide, providing a better understanding to the public and the researchers of the situation during the covid-19 epidemic in infected countries with their social responsibilities alongside precautions to mitigate certain difficulties by improving management. Furthermore, it confers the impact on the society, education, communication, and economy of infected countries.

Material and Methods

Search strategy

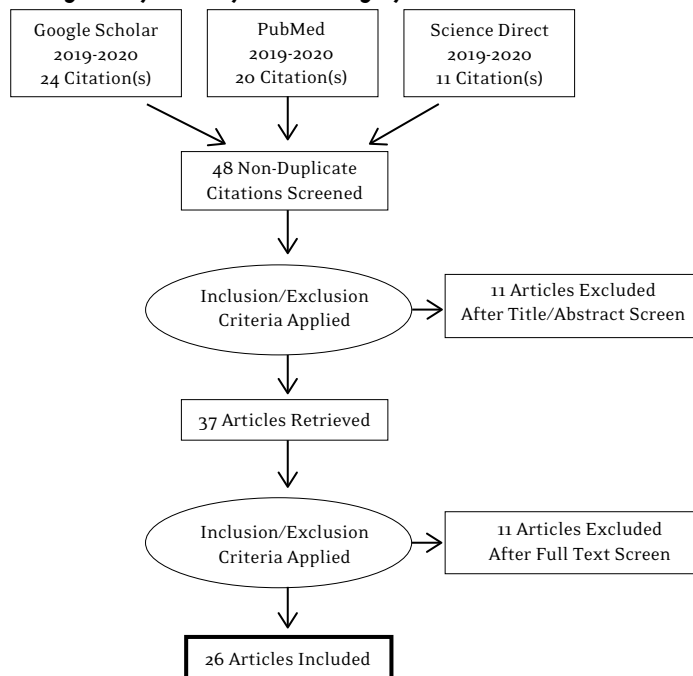
The study followed a qualitative case study approach that included literature review and document analysis in the specific area of study (i.e. the socio-economic effects of covid-19). The study used the literature review approach which requires the assessment and analysis of relevant literature

related to the searched topic that helps finding comprehensive information. The literature review took place from March 2020 to July 2020 and focused mainly on a wide range of data sources including journal articles, books, government documents, newspaper articles, and policy reports. Journal article explorations were made with reference lists of retrieved articles and textbooks and electronic databases with advanced search options like Google Scholar, PubMed, Science Direct. Government documents were found from governmental epidemic web sites and policy reports from the World Health Organization (WHO), Centers for Disease Control and Prevention (CDC), government departments, and selected published research literature.

Screening of the articles and data extraction

The titles of the articles were selected and ‘irrelevant’ documents which provided no information on the socio-economic impact of the disease were removed. All the studies providing qualitative or quantitative information on the relevant subject area of socio-economic impacts related to epidemics were included in the study.

Figure 01 – PRISMA flow diagram of search for screening of articles



The topic considered for selecting articles was the socio-economic effects of covid-19. Google Scholar, PubMed, and ScienceDirect search engines were used to search articles in the time from 2019 to 2020. Furthermore, the keywords “COVID-19” and “socio-economic” were used for the advanced search.

From the literature search for studies which evaluated the socio-economic effects of covid-19, 55 citations were retrieved and Zotero software was used to remove duplicate articles, filtering 48 unique citations. After reviewing the titles and abstracts, 37 were eligible for further review, and the full articles were retrieved. A total of 26 articles matched our inclusion criteria and their information was included in this study.

The current review explores the impacts of covid-19 on the global economy and social activities, rather than considering a specific aspect of the pandemic. As such, adopting a literature review approach supports achieving this study’s aim, allowing for information from a wide range of perspectives and from different sources.

Results and discussion

Social responsibilities of society

Most countries which were infected with covid-19 tried to introduce various low-cost approaches to control the spread of the virus rather than go for expensive treatments like vaccination. Promoting social distancing behaviours, enhancing immunity, introducing certain hygiene practices, and widely wearing masks are considered as the signs of social responsibility of people to overcome this crisis situation.

Eat healthy foods which enhance the immunity

Covid-19 infections are more severe in older adults, obese individuals, or those with underlying medical conditions such as diabetes, respiratory issues, and heart problems, reports of severity of infections in pregnant women are still lacking and few cases have been reported in children (Li, Q. et al., 2020). Therefore, public health departments of the countries advised people to eat

healthy foods which enhance immunity and follow good hygiene practices.

Wash hands often with soap

Governments encourage people to often wash their hands with soap, after touching anything in their day to day activities such as while working-out, after picking up anything, getting a haircut, visiting the ATM, and the like. Therefore, the WHO has offered the correct procedure of regularly and thoroughly cleaning hands with an alcohol-based sanitizer or washing them with soap and water for at least 20 seconds each 15 minutes. While respiratory viruses are mostly transmitted via large respiratory water droplets, the indirect transmission can happen via hands. Peiris et al. (2003) documented coronaviruses can also infect the human gastrointestinal tract and faecal-oral transmission might happen.

Practise social distancing

Social distancing is a rule that prevents infection, which involves avoiding contact between infected and noninfected. Social distancing eventually decreases the spread of disease. Viruses like covid-19 are predominantly transmitted via water droplets emitted from the mouths or noses of infected people when they sneeze or cough, which can land on the surfaces, ground, and people’s hands or faces. The WHO recommends keeping at least 1 m distance between each individual and avoiding physical contact with others, especially in social gatherings with hugs, kisses, and handshakes. The traditional welcoming tradition of Sri Lanka and India such as the “Ayubowan” have now become popular since it avoids physical contact.

Therefore, governments around the world responded to the covid-19 pandemic with social distancing as a major aspect of the strategies to limit the spread of the virus. These often include limiting social contacts, group works, and schooling among healthy individuals, to delay spread and reduce the size of an outbreak. However, this limits the use of public spaces and the unnecessary social gatherings and crowded events, which will lower the chance of people being exposed to the pandemic. Cowling et al., (2020) noted that the social

distancing measures during the covid-19 outbreak reduced community transmission by 44%, which is greater than the estimated 10-15% reduction in influenza transmission from school closures applied alone during the 2009 pandemic in Hong Kong. The social distancing allowed some measures such as allowing employees to work from home, organizing meetings via video calls, avoiding unnecessary use of public transport, and certain countries have also imposed travel restrictions.

Practice respiratory hygiene

Following good hygiene practices are important to reduce the epidemic; such as coughing with the elbow bent over mouth and nose or using tissues to cover the mouth and nose and immediately disposing of them since droplets spread the virus. Transmission of respiratory viruses mostly occurs via large respiratory water droplets and some can spread via fine particle aerosols (Fong et al., 2020). In the first outbreak, many countries imposed mandatory use of a face mask. The use of masks is part of the management measures used in preventing and controlling the spread of certain respiratory viral diseases, including covid-19 (WHO, 2020b). In addition to face masks, face shields are considered to provide a level of face protection and they are personal protective equipment used by many workers (e.g., medical officers, dentists, veterinaries) to protect the facial area (eyes, nose, mouth) from splashes and spatter of body fluids (Roberge, 2016). However, face shields are generally not used alone, but in combination with other protective equipment.

Furthermore, the general communities in many countries have also changed their behaviors in response to the covid-19 pandemic situation. Cowling et al., (2020) surveyed people in Hong Kong, where people chose to stay at home, with more than 90% of respondents reporting that they avoid visiting busy places and 98% of them preferring to wear face masks when outside from home.

Stay home if feeling unwell

Influenza-like virus infections spread from person to person mostly by close contact and preventing contact between infectious and susceptible persons reduces the spread of illness (Fong et al., 2020).

If someone is unwell, the person should follow the advice given by the healthcare provider, national or local public health authority or employer to protect themselves and others. Governments regulated that the people who have symptoms similar to coronavirus infection should stay at home and keep away from society to reduce the spread. Therefore, voluntary home isolation could be a desirable tactic to prevent onward transmission compared with other personal protective measures (Fong et al., 2020).

Seek medical care early

Symptoms like sore throat, slight runny nose, fever, cough, and difficulty of breathing are first stage syndromes for covid-19 (Casella et al., 2020). As per governments' guidelines, a person with symptoms should seek medical care as early as possible and communicate with covid-19 healthcare professionals. These actions help identify and separate covid-19 patients. A number of primers, probes, and test kits were developed for early identification (Del Rio; Malani, 2020) of infected individuals. Moreover, Zhao, Yu et al. (2020) suggested that a considerable number of patients might not have been identified promptly and, by remaining at home, might have promoted transmission between their family members. Therefore, as said Jing et al. (2020), the evaluation of suspected patients' needs to be accelerated followed by early quarantine of infected patients in a healthcare setting. Jing et al. (2020) also demonstrated that home quarantine is urgently required to minimize the spread of the virus.

Travel history and quarantine period

CDC documented that people should stay at home for 14 days following they return home from international travel (CDC, 2020). However, most travellers didn't follow these guidelines and helped spread the epidemic all around the world. From the same guideline, if someone had close contact with an infected person, they should self-quarantine for 14 days without engaging with the community. Li, X. et al. (2013) documented that the obligatory quarantine policy in Beijing, China during the influenza A(H1N1) pandemic in 2009, reduced the number of cases at the peak of the epidemic

compared with projected values and also delayed the epidemic peak with high social costs. However, prolonged quarantine can cause a considerable burden to social services, companies, and workers (Rothstein; Talbott, 2007).

Socio-economic impact of covid-19

This section of the article presents a summary of the social and economic literature in the pandemic period, discussing information on community mitigation measures implemented to control the pandemic and its consequences on different levels of the societies. Covid-19 rapidly caused shocking socio-economic impacts such as unemployment, income loss, and loss of businesses. Basic consumer needs were highly affected due to unavailability and poverty due to the crisis situation, which has created vast economic and social challenges among the communities in many social groups and affected community dynamics. Therefore, covid-19 has posed challenges to some countries due to high population densities and high levels of poverty, improper health infrastructures, insufficient social protection, and poor access to clean water and sanitation. This section documents the conditions of the spread of the virus and reviews how the economic crisis affected countries in many ways.

The dedication of the medical staff

Community mitigation measures were implemented by government health authorities to reduce transmission of the virus and thus reduce the growth rate of an epidemic, decreasing the epidemic peak and the peak demand on healthcare services, as well as reducing the number of ill persons (Fong et al., 2020). Medical personnel were at the forefront of the fight against the covid-19 and they took responsibility as a healthcare shield even with the high risk of infection. Worldwide, doctors and nurses are gathering in the covid-19 epicenters in several countries. However, medical sector personnel also have certain limitations considering their personal health since they are highly vulnerable to infection. Some affected countries could not control the situation easily, since doctors and nurses became a limiting factor

in the treatments. Consequently, in some countries, the increased number of patients, insufficient beds and ventilators resulted in an increasing number of deaths and exhaustion of the medical team. Several cases were reported of infected medical staff that needed to quarantine due to misidentification of patients and to being misled by patients. Moreover, due to lack of hospital beds, most of the people are being neglected at home in self-quarantine. Medical doctors and nurses are sometimes spending more than 12 hours without leaving the healthcare centers or hospitals at a time; thus their families face difficulties in their lives without parents or a responsible person. Medical staff may also experience the distress of contaminating and spreading the virus to their families, friends, or colleagues (Verma et al., 2004). Xiang et al., (2020) suggested that safe communication channels between medical staff and their families should be set up, and progress reports and health status updates should be given to them and their families. Considering all these factors, Fang et al. (2021) documented that, during the epidemic, psychological problems are a serious issue of healthcare workers, especially nurses and minor staff members in the epidemic prevention and control positions, and most of them are in depression. Mental health directly affects social function and professional ability. Therefore, close attention should be given to improve the psychological state of healthcare workers who are under stress (Mamun; Griffiths, 2020).

Collapse of supporting social network and essential public services

Governments are trying to continue public services such as basic administrative, water and electricity, waste collection and street cleaning, and public transport services in a crisis context. Although the public expects essential public services during the pandemic, public service officers understanding these as necessary services protect their own staff on a rotation basis (OECD, 2020). Some governments decided to continue essential public services and some social works. Thus, employees are not leaving the workplace for prolonged periods to provide their services.

Social workers are performing an important role of delivering goods and services that are important at the time. Unfortunately, those who have been helping are susceptible to get infected by the virus leading to a collapse of supporting services. Most governments took actions to close community supporting networks in some lockdown areas, consequently supporting people who are not eligible to provide their services. However, social workers manage to extend their services to restricted areas experiencing exhaustion as a result of an insufficient number of helping hands. Therefore, along with social workers, fellow social work companies, telecommunication companies, media companies, and army personnel are handling the ongoing supporting social works.

Curfew and panic buying

Infected countries have imposed lockdowns or curfews that prevent people from leaving or entering an area and people are required to stay at home and self-quarantine. Large gatherings are also forbidden and most government and private sector employees are encouraged to work from home. Supermarkets and online delivery services have reported huge growth in demand as customers stockpile goods such as rice, toilet paper, masks, hand sanitizers, and orange juice as the pandemic escalates. Qiu et al. (2018) mentioned that during the SARS epidemic situation the drug purchasing spree had spread to cities, then gradually spread throughout China.

Some governments stressed the need to avoid panic buying and assured that the government was taking all steps to ensure that the supply of essential commodities was not disrupted. However, queues for filling stations, groceries, food markets, pharmacies, and banks were still huge, with some shops closed due to lack of goods and people panic buying without considering the 1 m distance from each other and wearing a face mask for their protection of themselves. Ultimately, it risks healthcare workers who need these items most and, unfortunately for the global markets, also leads to shortages of certain items as most of such items are manufactured by China, which is the covid-19 epicenter. As a society, people overlooked

the pandemic as time passed by and focused only on purchasing of needs while neglecting the spread of the virus. Kostova et al. (2019) mentioned that apart from the panic buying some people can't buy what the need daily due to poverty. Therefore, governments and world organizations' investments would help to relieve poverty at least until the end of the pandemic.

Employment and income

Manufacturing and construction companies and their employees, the self-employed, and people who work in the retail and transport sectors were most affected due to the adverse financial crisis. As a result, their households had experienced either job loss or an income loss, while they ensured their lives during the crisis (Acs; Karpman, 2020; Fletcher, et al., 2020). The closing of workplaces and switching to work from home changed the world in different dimensions among different groups of workers. Labor supply would be impossible due to risk of death, illness, and quarantine whether from government restrictions or from voluntary worker decisions to avoid the risk of infection during working hours. Duarte et al. (2016) documented the H1N1 pandemic impact in 2009 on missed days of workers in Chile and estimated that it resulted in at least US\$16 million in labor productivity loss due to missed working days. Therefore, most office workers in various areas continued their jobs at home without much disruption. Working from home is quite new to Asian countries but most European countries managed it well. Government workers could do their jobs such as teaching, guiding, and accounting from their homes. Thus, they are much more comfortable maintaining their livelihoods than employees in some sectors where physical presence is highly essential, services including, hospital staff, food deliveries, pharmacy holders, water and electricity employees, municipal staff, etc. However, most office workers are protected from getting the virus by having better social protections than workers whose physical presence is crucial. Nevertheless, observing the work is a difficult task that is not as efficient as physical monitoring. Furthermore, virtual working has certain constraints such as lack of facilities with internet connection, low intensity of coverage, the cost of

connection, etc. Communities that can work from home and online have an income for their survival until the end of the crisis. Conversely, people who earn on a daily basis directly suffer from the crisis consuming their savings and need loan facilities or social funds from the government or personnel. However, certain governments release funds for loan takers in the private sector to keep their employees' salaries until the end of the lockdown period to avoid corrupting productions or services.

Education

UNESCO (2020) documented that schools have been closed in many countries, due to the crisis, with nationwide closures impacting over 91% of the world's student population. Furthermore, 107 countries are estimated to have implemented national school closures related to covid-19, affecting around 862 million children and young people, which is almost half of the global student population (Viner et al., 2020). However, closing schools can considerably affect the transmission of influenza and play an effective role. Reducing the covid-19 transmission among children would depend on their susceptibility to the infection and their infectiousness when infected (Cowling et al., 2020, Ali et al., 2018). In many countries, education ministries and school administrations switched from in person education to distance learning mode until the end of this crisis. However, the distance learning is only possible for students and teachers in lockdown areas that have internet facilities and computers at home. Even in developed countries, virtual learning is very effective only in capital cities since most of those living in rural states do not have proper access to such facilities. Developing countries have not yet developed their education system into distance learning mode and need to moderate the education system, which will take a few months, but this will be an experience for future crises. For instance, virtual laboratories and some research facilities are unavailable in conventional education systems. Furthermore, effective distance learning requires good supervision from both teachers and parents, the experience of teachers may be critical in some countries which have no well-established online education. It also requires

a space free of disturbance from the surrounding environment which is inaccessible in many households during daytime.

Networking and organizing

During the pandemic, meetings and gatherings have either been canceled or postponed. As a result, several other national and regional level events have been canceled. However, using efficient telecommunication networks assures the communication along with optimal visual experience with high-quality images (Jell et al., 2019). Fortunately, these technologies have facilitated the successful establishment of virtual communities promoting "social-virtual" events for institute, organization, and family events. They also have some limitations such as human contact, affections, and emotions that are impossible to reproduce on an online platform. Despite the limitations, many people in different affected countries adapted to new techniques to keep their relationships with family and public networks. However, those who without easy internet and mobile devices or experience of using it for networking are isolated during the crisis. Furthermore, weddings and funerals are not executed the traditional way since governments are not allowing gatherings with more than a few members. Specially, funerals are not allowed for those who died due to coronavirus infection and cremation is done within 24 hours of death.

Communication

People should be aware not to believe the rumours on social media, which inaccurate, and to know the latest updates on the covid-19 outbreak via correct sources such as, the websites of the CDC (Centres for Disease Control and Prevention), WHO (World Health Organization), and the relevant ministries of the countries. Ma (2008) noted that due to a lack of truthful official information, informal information about the SARS epidemic situation spread over word of mouth, short messages, social media communication, and other ways. Therefore, the urge to spread all kinds of rumours worsened the spread of social panic, reflected in increasing panic buying of drugs in cities. Specially, social media platforms like Facebook and Twitter are

facilitating important conversations regarding the virus, while also allowing misinformation and overstatements to spread. Public health experts and scientists use social media to engage with the community, and community leaders use it to create volunteer networks. Some public experts also use messages or emails to disseminate their experiences and knowledge to the public and most of them result in wide sharing and engagement across the populations.

Economic impact

The crisis has already affected the global economy since people are staying home and the demand for goods and services have fallen. Therefore, many infected countries showed a negative effect on the economy. In many countries, industrial production, sales, and investment all fell during the epidemic period when compared with the same period in 2019. This may be a result of the supply not working properly due to some factors including those that affect the productive capacity of the manufacturers, such as countries and regions under lockdown, trading partners not being allowed to supply ingredients. Industries could also close to mitigate the infection risk for employees and customers alike and tourism, transportation, shipping, retail, and cafeterias are possible examples of those.

Moreover, the demand factors are also affecting the economy, such as falling consumer confidence could cause lower household consumption, in which consumers may not be properly paid or unemployed, and falling business confidence could cause lower investment with a risk of selling and profit. Delivorias and Scholz (2020) documented that during the 2003 severe acute respiratory syndrome (SARS) epidemic, consumer expenses dropped significantly in Hong Kong and Singapore. This can impact consumer expenses.

All of the above factors potentially impact the economy while paralyzing local or international supply chains and infected countries have no option than wait the end of the pandemic and hope that the crisis may abate then. Delivorias and Scholz (2020) documented that reports from the World Health Organization (WHO) and the World Bank estimated

the higher impact of such a pandemic, bringing the total cost to 2.2-4.8% of global GDP (US\$3 trillion) in which, South Asia's GDP could potentially fall by 2% (US\$53 billion) and Africa's GDP by 1.7% (US\$28 billion). Therefore, governments and businesses should engage to recover the economy when the crisis is over and reconstruction. However, the World Bank Group (2017) documented that the outbreak caused a significant loss of progress in the private sector, posed threats to food security due to a decline in agricultural production and troubled trade with restrictions on movement, goods, and services. Some countries are totally dependent on exporting some products - for instance, Somalian economy mainly relies on production of livestock products and trade (50% < of GDP) due to the import bans enacted by Arabian countries following the Rift Valley fever outbreak in 1997 and suffered a drop of more than 75% exports. Therefore, countries like Somalia faced huge issues with their employment along with the collapse of the main source of government revenue (Peyre et al., 2015).

Consequences of the pandemic will increase with the short-term biggest impact being felt in the tourism sector. Rassy and Smith (2013) documented the Mexican tourism sector during the H1N1 influenza pandemic and its impact on the economy. Furthermore, Mexico lost around one million overseas tourists and an estimated US\$2.8 billion. However, covid-19 heavily impacted European countries and that may be a huge loss for the economy related to travelling in tropical countries like South Asia.

In considering the long-term effect, the most considerable impact would be regarding treatments (UNDP, 2017). Moreover, the public and private health system also affect the economy as epidemics caused by illnesses can also make the need for long-term treatments, with covid-19 patients needing more than 14 days to recover until discharge from hospitals.

In this situation, online digital marketing systems are very useful for business purposes, and it makes a strong digital society for the supply chain of some products.

Considering the global stock markets, huge changes in stock markets occurred, where shares in businesses are bought and sold, and it may affect

many investments in individual savings accounts where central banks in many countries reduced interest rates. Basically, investors are afraid to invest their assets during the crisis period while risking full economic growth.

Additionally, governments around the world have announced travel restrictions to reduce the spread of viruses among countries. Therefore, the travel industry is badly damaged along with tourists cancelling their travel plans and some being locked down for days in visited countries due to airlines canceling flights.

Final Considerations

Covid-19 has already become a global challenge and its spread and mortality rates are alarming strengths of the pandemic. Still, expecting that the disease will soon stop spreading is unrealistic. Infected countries already introduced some social responsibilities including social distancing to control the spread of disease and its severity. However, medical personnel are at the forefront of the fighting against the covid-19 and they took responsibilities as a healthcare shield even with the risk of infection with some health limitations as they are highly vulnerable to infection. Social workers are performing an important role of delivering goods and services important at the time due to the collapse of social welfare systems. Furthermore, infected countries have imposed lockdowns or curfews that prevent people from leaving or entering an area and people are required to stay at home and self-quarantine. Thus, large gatherings are forbidden and most government and private sector employees are encouraged to work in home office. Some governments stressed the need to avoid overbuying due to panic and assured that they were taking all steps to ensure the supply of essential commodities. Schools have been closed due to the crisis in many countries, with nationwide closures impacting over 91% of the world's student population. Therefore, in many countries, education ministries and school administrations have replaced their education model with distance learning for several months for as long as the crisis period lasts. The crisis has already affected the global economy since people are staying

at home and the demand for goods and services have fallen. Therefore, many infected countries showed a negative effect on the economy.

Strengthening the public health measures to protect communities provides an opportunity to learn about infectious disease control via a life event approach. Therefore, this may empower the whole community with the willingness to deal with another outbreak in future.

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Authors' contribution

Mahagamage and Marasinghe designed the study, collected data, wrote the manuscript, and performed its final revision.

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