Personal experience with measures to protect communities against COVID-19 in Australia

Eliška POLCAROVÁ

Fakulta bezpečnostního inženýrství, VŠB-TUO,

Lumírova 13/630, 700 30 Ostrava – Výškovice, Česká republika;

Eli.polcarova@gmail.com

Abstract: The COVID-19 pandemic over the past few months has highlighted a significant lack of the preparedness of individual states to deal with such a difficult situation. All countries have sought to design and implement an appropriate strategy to help reduce the risk of the spread and the effects of the disease in these countries. This fact also affected the island states of Australia and New Zealand.

The article aims to present and evaluate personal experience from Australia focused on the implementation of measures and their subsequent impacts not only on the local community but also on foreigners.

Keywords: Australia, community, COVID-19, measures, resilience

1   Introduction

Human society has been struggling with viral diseases for centuries. The more society began to civilize, build cities, and develop trade routes to connect with other cities, the higher the likelihood was that people would "bring" a new illness into the city. Most people have been killed by diseases such as plague, tuberculosis, cholera, smallpox, measles in history. Currently, HIV/AIDS, influenza, SARS (2003), or MERS (2012), and now COVID-19 can be named. Some diseases are managed by vaccines and antivirals to control, while others have been completely eradicated. For some, but still, there is neither prevention in the form of vaccination nor subsequent treatment. In the future, the community will be threatened by these tiny creatures, which are not visible to the naked eye. The effects of these diseases will not only be on health but also socio-economic impact [1].

Coronavirus disease (COVID-19) is an infectious disease caused by the newly discovered coronavirus SARS-CoV-2. The world officially learned about COVID-19 at the end of 2019. According to studies, the disease broke out in Wuhan, China, but the exact cause is unknown. The wholesale Chua-nan seafood market in downtown Wuhan is considered to be the original outbreak of the disease. In December 2019, the first cases of pneumonia were reported in the city for an unknown reason. In mid-January 2020, the disease spread to other Chinese provinces due to travel to celebrate the Chinese New Year [2].

On January 30, WHO declared the Global Health Emergency, and on March 11, COVID-19 was declared a pandemic. The infectious epidemic spread beyond the country's borders, where the outbreak occurred and was brought to Europe, America, Australia, and Africa. In total, COVID-19 has so far spread to more than 151 countries [3, 4].

The article will present personal experiences and introduce the measures implemented by the Australian Government to reduce the spread of the new COVID 19 disease, mainly in the state of New South Wales (NSW).

2   Implementation of measures to reduce the spread of COVID-19 in Australia

The following chapter seeks to capture the most critical responses of the Australian Government in the form of (emergency) measures that respond to developments in the situation of COVID-19, mainly in NSW. The issued measures are dated from February 1, 2020.

The first cases of COVID-19 occurred in Australia in early February. These were three Australian tourists returning from Wuhan. Other cases occurred at the end of February on the cruise ship Diamond Princess. Based on these facts, the Prime Minister activated the Health Sector Emergency Response Plan for Novel Coronavirus (the COVID-19 Plan). With the end of the summer holidays approaching and the start of the new school year (mid-February) in schools, the Australian Government has decided to close the state borders to all citizens with a Chinese passport. This measure was subsequently extended to persons who have resided in China or transited through China for 14 days [5].

During March, new cases of COVID-19 infection began to emerge, and the Government was forced to take further measures to reduce the spread of the disease. One of the measures was to promote increased hygiene:

- regular handwashing with soap,
- not touching the face,

- staying at home
- furthermore, if possible, staying at least 1.5 meters away from other people [6].

This information was provided to people not only in the form of leaflets in the store, on toilets, on television or the Internet, but even applications (such as the COVIDSafe app, the Coronavirus Australia app or the Australian Government WhatsApp channel for COVID-19), which were created to inform situation in the area [7].

Outdoor gatherings were banned for more than 500 people, indoors for more than 100 people (including school events) [6]. A key measure issued on March 20 was the closure of the state borders of Australia and New Zealand to all non-residents, residents and family members. The move also launched a mandatory 14-day quarantine at home or the hotel for all newcomers, including Australian and New Zealand citizens [8]. A few days after issuing restrictions on public gatherings, the NSW government had to close all beaches because the public gathering limit was exceeded. People did not comply with the social distance of 1.5 meters [9].

On March 23, all pubs, licensed clubs and hotels (except accommodation), religious services, indoor sports facilities, cinemas and casinos were closed. Restaurants and cafes could only offer food and drink with them. Schools and grocery stores have so far remained open. Most universities have switched to distance learning and postponed the dates of exams and graduations. Primary and secondary school principals have allowed parents to leave their children at home if provided with online tuition or other forms of education. Stores introduced a new measure in the form of a controlled number of people in the store. Upon entering the store, visitors were asked by store staff to use a disinfectant gel. Wearing masks was not mandatory, only recommended [6].

On March 24-25, some Australian states and territories (Tasmania, NT, WA, Queensland) began pushing for border closures to reduce the spread of the disease between states. From the point of view of the Czech Republic, this would be the closure of borders between individual regions [6].

As of March 27, the Australian Government has been urging international travellers to return to their home countries. It also calls on Australian citizens to return from abroad to Australia [6].

March 30 brought another drastic measure in the form of restrictions on movement in public. The public meeting (excluding family members) was limited to two people only. This restriction did not apply to shops, medical care, outdoor exercise, travel to work or school [6].

During the Easter holidays, all public places for worship and masses were closed. Due to the ever-increasing risk of spreading COVID 19, only two could move in public, not family and domestic members. It is still necessary to observe a social distance of 1.5 meters [10]. [10]

The end of July brought a new measure in the form of wearing masks. Wearing mouth and nose protection was required in places where it was difficult to maintain physical distance, such as public transport [11, 12].

There is no official information on when the Australian border will open to the outside world.

3 Possible socio-economic impacts of mitigation measures on communities and sustainable development goals in Australia

In 2015, 17 UN Sustainable Development Goals were adopted at the UN Summit under the so-called Transforming our World: The 2030 Agenda for Sustainable Development [13], all of which are to be achieved by 2030. These goals seek to show a way to alleviate or completely eliminate the problems of today's world, such as poverty, hunger, air or water pollution, or gender inequality. Both individual United states took part in the preparation and representatives of the private, public and academic sectors.

Goal 1 is to eradicate extreme poverty in all its forms around the world. Ensure that everyone has enough food, drinking water, clothing, and children to be educated in schools or have primary medical care. The first goal is closely linked to goal 2, eradicating hunger and achieving food security, because the cause of hunger is poverty. Goal 3 is to ensure a healthy life and increase its quality for all ages. Goal 4 also follows on from the first goal. Primary free education can help fight poverty, improve the health situation, or better prepare for disasters. Goal 5 aims to guarantee equal rights, opportunities, and freedom for all, both men and women. Thus, ensure gender equality and, above all, strengthen the position of all women and girls in society. On the contrary, goal 6 seeks to ensure that quality drinking water is available. Women in developing countries do not have to go for water every day for several kilometres. Polluted water is also a significant cause of many diseases, so sanitation facilities are needed to protect health. Because many people in developing countries do not have access to electricity, the purpose of goal 7 is to ensure access to affordable, reliable, sustainable and modern energy sources for all. Access to electricity can help these people fight poverty, improve health care, and improve education. Goal 8 focuses on two areas. The first area promotes decent work for all. The second promotes sustainable economic growth. Goal 9 focuses on linking the construction of resilient infrastructure, promoting sustainable industry and innovation. The aim of goal 10 is to reduce inequality not only within countries but also between them. Goal 11 aims to create sustainable but also resilient and safe cities and municipalities. Goal 12 ensures responsible and sustainable production and consumption and is essential for individuals, businesses, and national governments. Goal 13

focuses on combating climate change while emphasizing adaptation to it. The aim is to be prepared for the risks associated with climate change and natural disasters. The goal14 emphasizes the reduction of marine pollution, the protection of marine and coastal ecosystems. For a change, goal 15 is to protect life on land. Reduce deforestation, restore destroyed forests and significantly increase afforestation and reforestation worldwide. The penultimate 16 goal seeks peace and justice in all parts of the world and strengthens institutions that prevent violence, terrorism and crime, including abuse, exploitation and human trafficking. Simultaneously, it emphasizes free access to information and the protection of fundamental rights and freedoms. The last 17 goal emphasizes the strengthening of cooperation between developing and developed countries. In particular, cooperation on the development of new technologies, science and access to innovation. Figure 1 is a summary of all 17 targets, including the full title and distinctive display [13].

Fig.1: 17 Sustainable Development Goals [13]

The consequences of the COVID-19 pandemic not only affect human lives and health (impact on SDG 3 and SDG 6) but also have a significant economic impact (impact on SDG 8) on the financial market and other vulnerable sectors such as manufacturing (impact on SDG 9 and SDG 12), tourism or hospitality. According to the Incubator for Media Education and Development [14] and the United Nations [15], the adverse effects of coronavirus will affect all Sustainable Development Goals (SDGs). These impacts also affect Australia. The following part of the chapter evaluates possible socio-economic impacts on communities in the NSW and SDGs.

As mentioned in Chapter 2, the closure of state borders was a key measure. This measure has a significant impact on the state's economy. The first consequences of closing the borders concern the study of international students, primarily students from China. Most international students come from China, where the annual number is around 250,000 students [16]. According to Victoria University modelling, the Australian university sector is expected to lose $ 10 billion to $ 19 billion between 2020 and 2023. However, it depends on how quickly Australia reopens borders to international students (impact on SDG 4 and SDG 8) [17].

Other consequences concern tourism. According to statistics, in 2019, 9.4 million international visitors visited Australia. This year is the largest drop in visitors from countries such as China, Japan and Malaysia. According to statistics, for example, 731,100 people visited Australia in January 2019 (2020 - 766,600), 927,200 visitors in February (2020 - 685,400), and 836,000 in March (2020 - 331,900). Since April, the number of foreign visitors is zero. Other statistics show that in 2019, tourism in Australia accounted for 3.1 % of the national GDP, contributing around USD 61 billion to the Australian economy (impact on SDG 8) [18].

Another measure was to restrict movement. This measure had a significant impact on the attendance of shops, restaurants and cafes. Despite the Prime Minister urging people to shop and keep the economy running, visitor numbers have fallen sharply. As a result, the owners of most stores had to close their stores, jeopardizing the economy. A possible reason why Australians have significantly reduced purchases in this way is that basic health insurance does not cover hospital treatment, which is costly [19].

On the other hand, panic began to spread among citizens over the effects of coronavirus and the possibility of closing grocery stores, and therefore these chains directly attacked. Within a few days, disinfectants and toilet paper were purchased entirely in these stores. Despite the assurances of toilet paper manufacturers on social networks that there is enough toilet paper, citizens continued to buy paper. Unfortunately, in some stores, there was a physical assault among shoppers [20]. The next few days, shoppers focused on other products, primarily Intermediate goods, rice, pasta and meat. The retailers, therefore, decided to set sales limits for selected products per person (see Figure 2) (impact on SDG 2, SDG 8 and SDG 12) [21].

Fig.2: Demonstration of product limitation and lack of toilet paper in stores [20,21]

In April, all states called on their citizens to return to their country of origin as soon as possible. At this point, chaos began at the airports. Everyone wanted to get home. However, most flights have been cancelled or postponed because of new measures and restrictions on air transport in all countries. Examples include health insurance for COVID-19, a ban on transit through the countries, and a negative test for COVID-19. Besides, measures banning travel abroad have come into force for Australian citizens (still valid). An Australian citizen can

only travel if he receives an exemption from the Home Office. At Australian international airports, a person is only admitted with a valid ticket for the day to avoid people gathering at the airport. In the case of an Australian citizen, it is checked whether he has a valid exemption from the possibility to leave Australia (impact on SDG 8, SDG 9 and SDG 11) [22]. During April, the number of international flights to/from Australia is limited to 3 flights per day (Figure 3). The number of passengers is also related to this limitation. Figure 4 shows a half-empty plane for about 300 people departing from Doha. The closure of 90% of business at airports also impacted economic growth (impact on SDG 8 and SDG 12).

Fig.3: Information board about departures at Sydney International Airport, Australia - author

Fig.4: Example of the number of passengers on a plane from Doha to Vienna - author

4   Conclusion

Despite the world's efforts to overcome this pandemic and implement appropriate measures to reduce the spread of the disease, the spread of the disease has a significant impact on the community's public health. Government measures have an impact not only on the social and economic aspects but also on the goals of sustainable development. This issue also affects Australia. Australia first responded to the COVID-19 situation at the end of February and has since sought to design and implement appropriate measures to slow the spread of coronavirus and protect the health of the Australian community. The article aimed to present personal experiences and impacts on communities in Australia. Informing the community about development, adherence to basic hygiene principles, and social distance has helped prevent the disease's spread. From a socio-economic point of view, the mitigation measures implemented in Australia will affect some sustainable development Tomt goals. The main impact is on SDG 3 (lives and health). The closure of Australia's borders to the outside world has economic

implications for tourism (SDG 8, SDG 9 and SDG 11) and the education of international students (SDG 4). The closure of shops and the reduction of the operation of cafés and restaurants have implications mainly for economic growth and production (SDGs 8 and 12). The final table 1 presents an overview of the impacts on selected areas of the SDG, including the economic losses.

Impact on areas (economic losses)	Impact on SDGs
Human lives and health	SDG 3, 6
Manufacturing	SDG 9
Tourism (assumption $ 61 billion)	SDG 8, 12, 14
Hospitality	SDG 3
Education (assumption $ 10 billion to $ 19 billion)	SDG 4, 8
Services (shops, restaurants, cafes)	SDG 2, 8, 12
Travelling	SDG 8, 9, 11

Tab.1: Impacts on selected areas of the SDG

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