

A Divergent Discussion on COVID-19

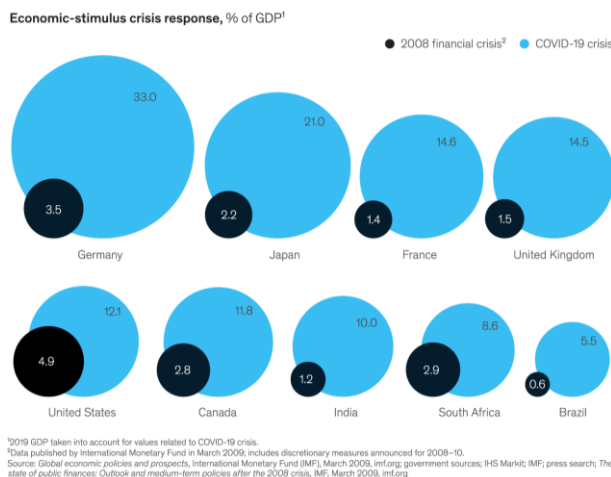
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Abstract: In this review, author talk about the Covid and what does it bring to human beings and introducing some important statistics of Covid and the pandemic. Besides, the policies with two different countries have been discussed and compared in the review, to state the harm of Covid and pandemic. After reviewing, the author gave the opinion of controlling of the virus. Now, it seems hard to control and monitor it every hour, but as the fast emerging of different variants, it needs to be monitored and controlled.

1. Introduction



Cited by

<https://www.mckinsey.com/industries/public-and-social-sector/our-insights/the-10-trillion-dollar-rescue-how-governments-can-deliver-impact>

Figure 1: Economic-stimulus responses to Covid-19 and the comparison of 2008 financial crisis.

In contemporary society, Covid-19 has been a harmful pandemic disease all around the world since 2019. Many countries around the world have spent a lot of energy on this, figure 1 shows the comparison of the GDP impact on both 2008 financial crisis and Covid-19, the most spending outside of expectation was mainly on first maintain financial stability, second maintain the household economic welfare and last but not least, the government helped companies survive the Covid-19 crisis [1]. With the passage of time, the vaccines to protect people from the novel coronavirus and the antiviral medicines to treat Covid-19 have been gradually invented, so what is

the smartest way for people to respond and control the Covid-19 today?

2. What is coronavirus

2.1 Introduction of Coronavirus

Coronaviruses are a large family of virus known to cause more serious illnesses such as colds, Middle East respiratory syndrome (MERS) and severe acute respiratory syndrome (SARS). SARS-Covid-2 is a novel coronavirus strain that has never been found in human society before. Figure 2 shows the schematic structure of this virus, it mainly contains two biological structures, as it is an RNA virus, the core is its genetic material RNA, outside the RNA it has the protein coat. On the lipid membrane, there is membrane protein, envelope protein and spike protein that mainly conducts the binding with human angiotensin-converting enzyme 2 (ACE2) [2].

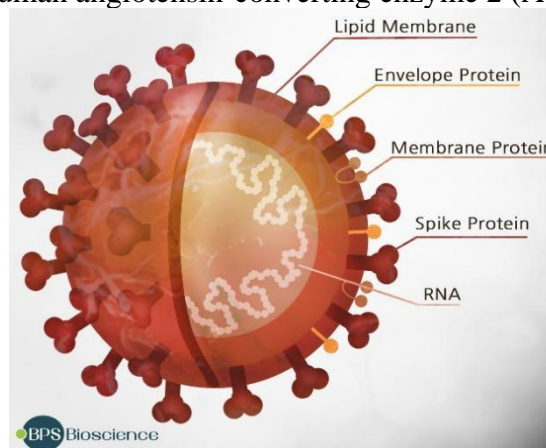


Figure is from <https://bpsbioscience.com/sars-cov-2-coronavirus-covid-19>

Figure 2: Viral schematic structure of SARS-Covid-2.

The first outbreak of CoV-19 is at the last day of 2019, China Wuhan Health Commission reported several cases of an unknown infection, and later in days, the novel coronavirus was identified [3]. Since the first case in Wuhan, later in two years, people worldwide have been suffering from Covid-19, it has impacted both the health and social life of human-being. And someone would call the covid-19 as a normal cold, but according to Wang's research, there are more mental and psychological influence of pandemic [4].

2.2 Damage caused by Coronavirus

Getting infected by Covid-19 is not only a normal and common cold, in some ways it would also have impact on the patient's mental health [4]. In the aspect of epidemiology, the Covid-19 could also harm a full community, as well as a nation or a culture. In this section, we are going to discuss the both biological and society damage caused by Covid-19 pandemic.

2.2.1 Biological damage

It's reported that post-covid-19 syndrome involves a variety of new, recurrent, or persistent symptoms that occur more than four weeks after people are infected with Covid-19 [5]. For some individual, the post-Covid-19 syndrome can last for months or years and even lead to disability. The most common post-Covid symptom must be long-term respiration dysfunction including the difficulty and shortness of breath or cough, for the coronavirus is a lung-infected pathogen. Others

could be the fatigue, heart, and digestive problems, and neurological or mental health conditions that have much attention, which could lead to difficult to think or concentrate and so on [6].

2.2.2 Society damage

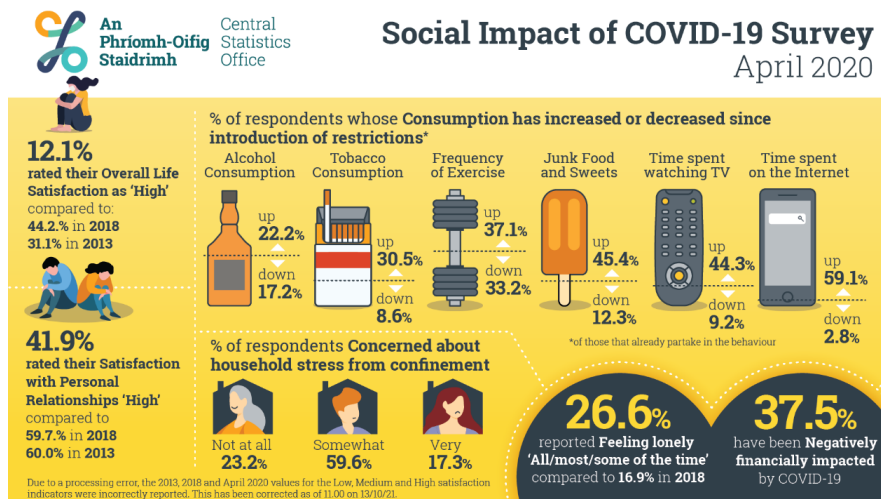


Figure 3: Survey on social impact of Covid-19 in April 2020

A survey on social impact of Covid-19 (Figure 3) was taken on April 2020, from the result, it shows the overall life satisfaction and personal relationships satisfaction after the pandemic had a sharply drop from 44.2% in 2018 to 12.1%. And almost 1/3 people who taken part in the survey reported the feeling of loneliness and 40% has been in the negatively financial impact. Also, in the survey indicated the use of alcohol and tobacco have a significantly increased, within the restrictions time, people were more likely to spend time on TV and internet as well as eating junk and sweet food.

Research also showed the mental health problem were arising during the first period of pandemic, people who lived in Wuhan, the first outbreak over the world had been in panic disorder, anxiety, and depression. There was also post trauma syndrome disorder within the community and city. All the normal people, medical workers and patients with mental disorders were under a huge pressure, this would cause a lot and variety of social damage including lacing of human resources and economic impact [4]. In this research also showed that the probability of depression and mental damage of frontline medical staff was twice as high as that of normal people.

2.3 Countermeasures of Covid-19

When Covid-19 first came to human, the first thing that made by authority was to make people stay at home and avoid meeting strangers. With the time passed, we had figured out what the virus is and what is the characteristic and even conduct the vaccine of Covid-19, the countermeasures have been changed. In this section, we would mainly talk about the method to control Covid-19.

2.3.1 Publish Health ways to control Covid-19

Isolation and quarantine are the first and basic ways of controlling an emergency endemic, by limiting the possible infected patients' routine and reducing transmission. Even though some thinks these two countermeasures are too violent and betrayed the personal willingness, but still, when facing the novel infectious disease, it's very useful during the beginning. Within the border, there are several quarantine stations to avoid the disease to be taken into the nation.

After the quarantine and isolation period, many governments reduced the force of being at home, and they took some restrictions such as avoid long time traveling, limitation of social size, social distance and so on. The detail of the restriction depends on different authority.

For education, almost all the schools and universities adopted online teaching measures; for firms, research found that not all the firms were using digital solutions, only 34% of firms increased the use of internet and digital platforms during the pre-pandemic level (Figure 4).



Cited via

<https://www.worldbank.org/en/news/infographic/2021/02/17/how-covid-19is-affecting-companies-a-round-the-world>

Figure 4: How Covid-19 is affecting the companies around the world from pre-pandemic levels

2.3.2 Scientific and clinical responses to the pandemic

In this section, three countermeasures taken by scientific and clinical will be discussed, including diagnostics, preventive and therapeutic drugs, and vaccines. These are the best hope of a return to normalcy. With the development of technologies, the diagnostics can use three dominant techniques: PCR, antigen tests and antibody tests. As the diagnostics become quicker, more reliable, less cost, these will give a basic blueprint for solving the next pandemic more efficiently.

There are a lot of prevention and treatment medicines can be used on the market now, and the emergence of the Covid-19 pandemic has led to a great development in antiviral drugs, there are nirmatrelvir, ritonavir, remdesivir and molnupiravir. These treatments can help some people manage their COVID-19 symptoms and reduce the risk of becoming seriously ill [7].

There are nine vaccines was approved by WHO from 2020, and containing mRNA vaccines, whole killed or attenuated vaccine, viral vector vaccine, and protein-based or protein subunit vaccines [8].

3. Covid-19 and Politics

3.1 Worldwide

The lack of international guidance and solidarity of the World Health Organization (WHO) director warned against the threat of expanding infection in fighting the novel coronavirus. It points out that the politicization of the COVID-19 issue has worsened events. Tedros pointed out that some joining countries have criticized the WHO. In the United States the WHO is too weak, too late and "biased toward China". Other franchisees have also demanded a new investigation into the cause of the COVID-19 pandemic (the world pandemic). Australia is urging the WHO to expand its authority to allow it to respond to the health crisis faster.

At the Online Dubai Government Summit of the World Government, "The world urgently needs

the unity of countries and the international community. Pandemic's politicization has weakened this solidarity". He stressed: "The biggest threat we face now is not the Novel coronavirus itself, but the lack of global unity and guidance." [9]

3.2 Policy in P.R.C

Covid-19 has entered its third year, and people's work and lives have changed, and no one can stay out of it. Despite China's ruling Communist Party's national congress in October, health officials are still adopting a "zero-coronavirus" policy, several factors suggest that the government will not rush to open, including the general acceptance of the policy by those who are inconvenient but have not experienced prolonged or repeated lockdowns [10].

3.3 Policy in the U.S.A

Compared to the strict policy in China, the States have freer policies, the government spends more money and human resources on treatment and vaccine instead of limited people's normal lives. Besides, there were some limitations with the international traveling. There are sayings that the public health is always political, the U.S.A is a very outstanding example, due to the political activity, there were hundreds of positions in the Centers for Disease Control and Prevention (CDC) vacant and eliminated before the pandemic, which could be one of the reasons leads to the huge amount of death cases in America. [11]

3.4 Comparison between the P.R.C and U.S.A

In this turbulent era, cooperation and good governance is the key to overcoming complex new global challenges such as the COVID-19 pandemic and climate change. Harvey Zordin, a senior researcher at the Center for China and Globalization, said in the China Daily post that China and the United States have taken very different ways to address their respective challenges. "It's a story about two systems of governance, — one success and another hard struggle." The following is a partial translation of the article [12]:

For the past two years, novel coronavirus has existed with humans, and some people have lost their lives, but the epidemic seems to be endless. Despite the differences between China and the United States, it is now crucial that the two countries cooperate through a bilateral and rules-based international order in areas where their national interests overlap. Our lives and our survival all depend on this.

When I think of this story, I recall the memorable beginning of A Tale of Two Cities, "This is the best, the worst; an age of wisdom, a stupid," which perfectly sums up two distinct patterns.

Of course, both sides have made mistakes, which is inevitable in the face of a global pandemic. However, one side of the whole government acted quickly to resolve and contain the crisis. The other side, under the command of then-US President Donald Trump, went in a completely different direction: denial and confusion.

Mr. Trump's past and present slogan is still "America first. "Thanks to him, the United States has had the largest number of infected and dead people after the COVID-19 outbreak."

According to the World Real-time Statistics website, the US has registered more than 65 million confirmed cases and nearly 900,000 deaths. China's population is four times that of the United States, with a total of 1, 35, 000 confirmed cases and about 5,700 deaths. [12]

Notably, the second only country to the United States is its neighbor India, with a similar population, but with 270 times more confirmed cases and 85 times the number of deaths. India, like the United States, seems to focus more on politics than human life.

4. Discussion and Outlook

Three years later, once the epidemic occurs, no one is happy, and the only thing you can pray for is not to happen to yourself. In conclusion, there is no need to spend a lot of energy on controlling Covid, but as the No.1 Disease X, the public health authority should keep monitoring it, when the virus becomes more harmful, the authority is supposed to warn the public and deal with it in time.

Even though there are nations who used the similar countermeasures to deal with the pandemic, no two nations are the same. The different policies did change and harm to our normal lives, including the restriction of international traveling, daily tests or/and a large amount of money spent on Covid-19 treatments. In the meanwhile, the vaccines and antiviral drugs do release the stress and harm to people, and with the development of technology, there are a variety of solutions to the problems caused by pandemic.

At the beginning of the outbreak, the quarantine helped us to limit the transmission, however, with the understanding and knowledge of the virus, the quarantine seems to be a rude and crucial policy for the public. There are other strong and useful ways to avoid or limit the outbreak, for example, getting vaccination and so on. Nowadays, most of nations in the world have made the people's lives back in normal, but not the same as the pre-Covid life.

The Covid-19 brings inconvenience to us, but some science and techniques are largely developed thanks to the virus. Indeed, the post-covid life cannot turn back to what it is like before the pandemic, but human beings are finding a new way to survive and continue living in the world.

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