

Third General Assembly

Implementing a coordinated global response to
pandemics



Forum	General Assembly 3
Issue:	Implementing a coordinated global response to pandemics
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Position:	Chair

Introduction

The world has suffered many disease outbreaks over the years. Yet still, after so many pandemics and epidemics, recent events have shown us that we are still not fully equipped or prepared for major outbreaks. In this day and age, where our world has turned into a global village, it becomes harder for us to control the spread of disease and easier for diseases to travel from country to country. History has taught us that our international trades play a big role in creating pandemics. The modern, interconnected world only makes this easier.

Definition of Key Terms

Antibody

When a person gets sick, their immune system creates antibodies. Antibodies fight off the sickness.

Asymptomatic

When a person is asymptomatic, they are infected with a disease, but do not present any symptoms.

Epidemic

An epidemic is the occurrence of more cases of a particular disease or condition than expected among a certain population group during a specific timeframe.

Globalization

According to the WHO globalization is “the increased interconnectedness and interdependence of peoples and countries, is generally understood to include two interrelated



elements: the opening of international borders to increasingly fast flows of goods, services, finance, people and ideas; and the changes in institutions and policies at national and international levels that facilitate or promote such flows.”

Gross domestic product (GDP)

The definition provided by investopedia is: “Gross domestic product (GDP) is the total monetary or market value of all the finished goods and services produced within a country’s borders in a specific time period. As a broad measure of overall domestic production, it functions as a comprehensive scorecard of a given country’s economic health”

Incubation period

The period between infection and the showing of symptoms

Pandemic

A pandemic is a worldwide epidemic that crosses international borders and usually affects a large group of people.

Personal protective equipment (PPE)

PPE are garments, such as face masks, that are designed to protect against infection or injury.

PMI

The definition provided by investopedia is: “The Purchasing Managers’ Index (PMI) is an index of the prevailing direction of economic trends in the manufacturing and service sector”

Quarantine

A period of isolation in which people or animals who have been exposed to a disease of infection go in.

Screening

Screening is defined as “the presumptive identification of unrecognized disease or defect by the application of tests, examinations, or other procedures which can be applied rapidly”

Social distancing

Implementing a certain amount of space between people in a social group.



Variant of Concern

The definition provided by the CDC is: “A variant for which there is evidence of an increase in transmissibility, more severe disease (e.g., increased hospitalizations or deaths), significant reduction in neutralization by antibodies generated during previous infection or vaccination, reduced effectiveness of treatments or vaccines, or diagnostic detection failures.”

General Overview

The earth has had a long history of pandemics and epidemics. The fast spread of diseases nowadays can be accredited to globalization. The many international travel and trade systems that are in place and the dependence and interconnection they have created, make it all the more difficult to control and limit infected areas.

Ebola (2014 - 2016)

Near the end of 2013 the first cases of the biggest Ebola Virus Disease (EVD) outbreak recorded were reported in Guinea. The disease then made its way through West-Africa. EVB has a very high mortality rate and, though originally the disease spread from animals to humans, now easily spreads from human to human contact.

The fast spread from Guinea to surrounding countries can be attributed to weak surveillance systems, increased mobilization across borders and poor public health infrastructure, according to the Centers for Disease Control (CDC). Research also showed that some civilians were unwilling to comply with the measures that were in place to control further spread of EVD, due to the belief that they clashed with their culture and traditions. Eventually, awareness campaigns were started with the support of local leaders. This seemed to reach and educate civilians and was a vital part into making them comply with the rules. Health care workers from all over the world were deployed to West-Africa. Assistance was also sent to help with, among other things, data collection, testing and education. Some countries implemented stricter screening procedures at their airports for those at risk of EVD.

Eventually, after 2,5 years, the outbreak ended with almost 30,000 reported cases and over 11,000 deaths. Though cases of EVD still pop up, countries now have a better capability to control spread and treat the disease.

Influenza

A common misconception is that the influenza virus is just like the common cold, when in reality it is much more serious. It can cause severe illness and infections that result in death. The flu can be especially dangerous for those with pre-existing problems, such as asthma.

In 1918 there was a severe pandemic that hit the whole world. An estimated 500 million people were infected and 50 million people died. An abnormality in this pandemic was the high mortality rate under healthy young adults and teenagers. There was no vaccine and treatment for secondary complications were scarce. Scientists and researchers did not yet understand what made the virus so destructive. Due to the limited aid medicine had to offer and the little information about the virus that was known, the only source of protection was isolation, quarantine and hygiene.

In 1957-1958 another pandemic emerged in Asia, which spread further to other countries. The death toll is an estimated 1 million people. Most deaths were due to complications that arose due to a weakened immune system caused by the flu. A vaccine was developed fairly quickly and the availability of treatments for the secondary complications stopped the pandemic.

A third pandemic started in 1968. Around 1 million people died, mostly citizens who were 65+. The strain of virus that started this pandemic still circulates to this day, undergoing constant mutations that lets it infect people.

The most recent flu pandemic was in 2009. The countries with the highest number of infections were those with widespread testing and surveilling. This suggested that countries with a lower amount of infections in fact had more, but they went undetected. Out of all previous pandemics, we were most prepared for this one due to the funds that were put into preparation for pandemics. Most of the deaths were among people ages 30 to 50, which is notable due to it previously being more among the elderly. The WHO advised countries not to close their borders or limit travel.

Cause of outbreaks

The influenza viral genome undergoes small mutations. Every time a new viral strain develops, your body is once again exposed to the flu. The antibodies you've created the previous time you came down with the flu no longer work against the new strain of virus. These changes cause 'flu season' in areas. Usually the mutations are minor (this is called antigenic drift), but every so often a major viral change (this is called antigenic shift) occurs. The magnitude of the mutation is so great that very few people have any antibodies that can fight it. This change is what usually causes pandemics. These mutations in viral strains don't solely apply to influenza. They're a form of evolution of many viruses, others include the coronavirus strain.

Coronavirus

Coronaviruses stem from animals, but sometimes the virus passes on to humans. From 2002-2004 a SARS-CoV-1 outbreak emerged from China. 8.422 people were infected. The death rate was 11%. The virus presented flu-like symptoms. China remained tight-lipped in the early stages of the outbreak, later receiving international backlash for not communicating the severity of the disease.

In late 2019 a COVID-19, otherwise known as SARS-CoV-2, outbreak surfaced in Wuhan, China, but it rapidly spread to other areas. The Chinese authorities placed affected people under quarantine, in an attempt to limit spread. Within just a few weeks the virus spread worldwide. Currently there are over 200 million reported cases, but this amount is suspected to be higher due to the lack of widespread testing in some countries especially at the start of the pandemic, as well as many people, primarily from the younger generation who are less vulnerable to this virus, are asymptomatic and therefore unaware they've been infected. It is believed that 40%-45% of infected people are asymptomatic. Although there have been multiple studies confirming that the transmission-risk of asymptomatic people is lower than symptomatic people, the transmission rates are "still sufficient to warrant policy attention", according to Byambasuren's review. Asymptomatic carriers are more likely to socialize and participate in their communities, thus exposing larger groups of people to the virus. Similarly, people traveling and/or participating in group activities during their incubation period carry the same risks.

At the start of the current pandemic the WHO stated governments shouldn't opt to restrict travel and movement altogether for long periods of time, saying it can interfere with aid and support. It is, however, a good measure at the beginning of an outbreak so that countries can gain time for risk assessment and come up with a plan. WHO's stance on lockdowns was "in certain circumstances, measures that restrict the movement of people may prove temporarily useful, such as in settings with few international connections and limited response capacities". The general recommendation was to closely monitor reports of influenza-like symptoms and pneumonia, keep the general public informed on the status of their country, follow the International Health Regulations (IHR, 2005), and urge member states not to interfere too much with international traffic.

The current WHO advice is that "each country should conduct a risk-benefit analysis and decide on its priorities". The general focus is still largely shifted towards risk assessments and keeping the public well informed. Furthermore, the organisation stated essential-travel(ers) should be given priority. In regards to the new variants the WHO urges nations to transparently share any new information and findings that come up. The general public has been advised to upkeep personal hygiene, implement



social distancing, self-isolate if feeling cold-symptoms, wear face masks (in some countries and areas), and, if available, get vaccinated.

Consequences of the COVID-19 measures

Even though the WHO advised against unnecessary travel restrictions, many countries decided to implement their own independent measures. This caused a massive dent in many economies. At the start of the pandemic China's PMI fell from 53.0 to 27.5 within a month. With the undeniable role the country plays in the international trade system, this alone has put many businesses all over the world in trouble. In the first quarter of 2021 however, China's economy picked up, with the PMI now being 54.9. Italy's GDP dropped a devastating 8,9% in 2020; the last time it was hit like that was right after the second World War. The current prediction is that it will grow by 4.2% by the end of 2021. Workers in FDI-dependent developing nations have arguably been hit the hardest, not getting benefits and ⅓ of all jobs in Africa have been lost. A study conducted by the International Labour Organization (ILO) found that the global income has declined 10.7% due to the COVID-19 pandemic, equaling a loss of 3.5 trillion dollars, or 2.9 trillion euros.

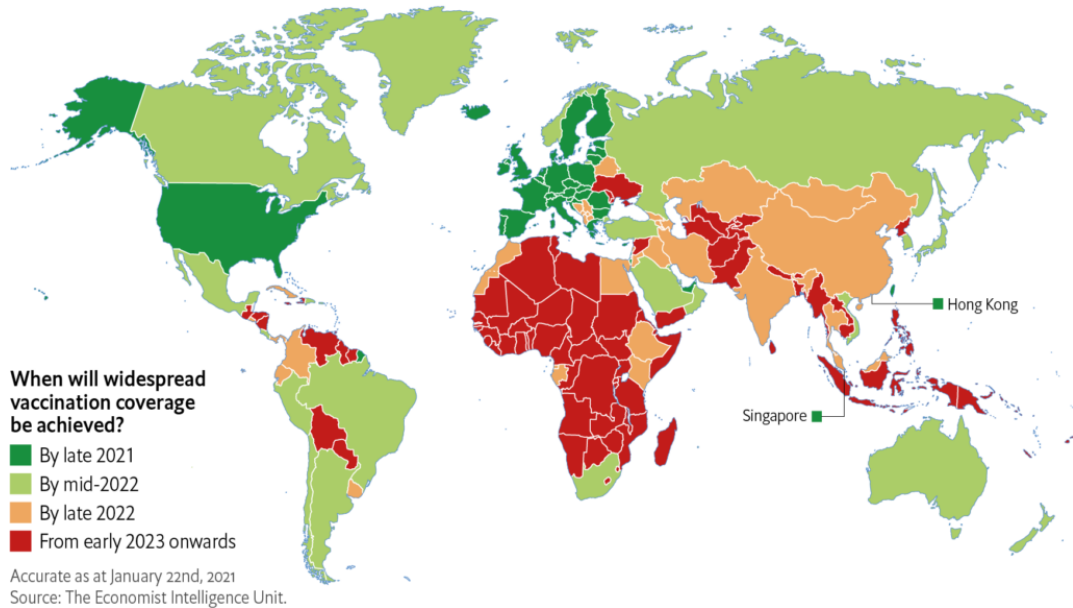
The economy and governments aren't the only ones who've suffered. Hate crimes against Asian people have grown, fueled by misinformation, conspiracy theories and fear. The internet and media play a big role in our world, most couldn't imagine life without them. Unfortunately, they created a platform that allows lies and false statistics to be spread. Additionally, some political figures have fueled this racism by promoting false narratives. In a time where the public will look up to their leaders seeking reassurance and will follow examples set by them, it is vital they don't further encourage fear and hate.

Conspiracy theories and misinformation have also started a range of protests against lock down measures, as well as vaccines. People in these protests have not been keeping an appropriate distance, nor have they been wearing face masks. This puts many at risk of COVID-19. It is important to keep the public well informed and to refute any false information that has been spread.

Poorer economies have less access to widespread testing and vaccinations. Countries with rich economies have more access to vaccines and tests, and some are even trying to take advantage of poorer countries by fostering a so-called vaccine-diplomacy: providing poor countries with vaccines through diplomatic contracts and deals to further their status in the

global economy.

Rich countries will get access to coronavirus vaccines earlier than others



Variants & vaccines

Viruses routinely go through mutations, often only resulting in minor changes. However some mutations are considered Variants of Concern (VoC), most notable are the Alpha variant (otherwise known as the British variant), and the Delta variant. The CDC has given the Alpha virus the following attributes: “50% increased transmission, potential increased severity based on hospitalizations and case fatality rates, no impact on susceptibility to EUA monoclonal antibody treatment, minimal impact on neutralization by convalescent and post-vaccination sera.” The Delta virus was given these attributes: “Increased transmissibility, potential reduction in neutralization by some EUA monoclonal antibody treatments, potential reduction in neutralization by post-vaccination sera”. Even though vaccines protect less against some newer variants, they are still very effective at keeping symptoms of the virus at bay, resulting in less hospitalizations and deaths. However, specialists continue to advise vaccinated people to practice protective measures such as mask-wearing and social distancing. A big concern about the variants is an antigenic drift that could lead to vaccine failure, by becoming too resistant to existing vaccines.

Other pandemics

One of the most famous pandemics was in the 14th century: The Bubonic Plague. The disease overtook the world and killed 75 - 200 million people. It would take Europe almost 200 years to get its population back up to the amount it was pre-pandemic. Though there are many theories as to why the pandemic ended, we are still not completely sure as to why. The most popular and most likely theory is that the pandemic ended due to the implementation of quarantines, the spike in cremations, better personal hygiene and self-imposed isolation.

It has been 200 years since the first Cholera pandemic occurred. Since then there have been 6 additional outbreaks. The spread has been due to increased migration. The start of the outbreaks is attributed to poor hygiene, contaminated food and water supply, overpopulated and poor living conditions and wars. At the end of the 19th century there were medical developments that created treatments and vaccines for the disease. Most of the recent Cholera pandemics and current outbreaks have started in developing countries. They stopped in Europe after many cities refined their water systems and general hygiene.

Major Parties Involved and Their Views

World Health Organization (WHO)

The World Health Organization obviously plays a big role in mitigating public health outbreaks. The organization created The Emergency Response Framework (ERF), a guide for disasters such as, but not limited to, pandemics. The framework has been very useful in the ongoing COVID-19 outbreak. WHO has also established the Information Network for Epidemics (EPI-WIN) to combat misinformation, and support the COVAX pillar, which aims to provide vaccines to poor countries.

New Zealand

New Zealand was the first country to have eradicated the Coronavirus (for 165 days). The country had some of the strictest lock down measures in the world, fueled by scientific findings, and they have proven to be effective. New Zealand restricted social contact, all forms of travel, closed down all non-essential buildings and attractions and closed its borders. The country is still pursuing an elimination strategy. Now that vaccines have become available the country still has measures in place, learning lessons from other countries which have either stopped or almost completely stopped measures since the vaccinations began, and experienced a surge in cases. All the measures have gravely impacted the economy. Statistics show that it will take years until the economy will improve to how it was pre-corona.

China

The Chinese government has handled the COVID-19 pandemic with extreme, but necessary measures. In addition to the somewhat conventional measures as lockdowns, bans on mass gatherings and urging personal hygiene, Chinese authorities had door-to-door health checkups, they isolated health care workers in the temporary hospitals, inspected and monitored inhabitants of large apartments and even made use of new technology: drones and facial recognition software.

Italy

Italy was hit the hardest of the European countries in 2019. The virus spread extremely rapidly throughout the country. Italy was quick to declare a state of emergency. The country placed bans on mass gatherings, non-essential businesses and buildings and restricted travel, and placed travelers in mandatory quarantine.

World Bank

The World Bank plays an important role in pandemic outbreaks, lending money to developing countries with favorable conditions.

Timeline of Events

April 7th, 2021	“COVAX delivered life-saving vaccines to over 100 economies, 42 days after its first international delivery. As of this date, COVAX had delivered more than 38 million doses across six continents”
May 19th, 2020	73rd World Health Assembly
30 April, 2020	“The Director-General convened the IHR Emergency Committee on COVID-19 for a third time, with an expanded membership to reflect the nature of the pandemic and the need to include additional areas of expertise.”
March 11th, 2020	The WHO declared the COVID-19 outbreak as a pandemic.
2017	The WHO releases the second edition of the Emergency Response Frameworks Publication (ERF)



August 8th, 2014	The WHO declared the Ebola epidemic to be a Public Health Emergency of International Concern (PHEIC)
2013	The WHO released the first edition of the ERF
2009	Influenza pandemic
1968	Influenza pandemic
1961-1975	The last cholera pandemic
1957	Influenza pandemic
1918-1920	Influenza pandemic
1881-1896	The fifth cholera pandemics. This was the last significant outbreak in Europe
1817-1824	The first cholera pandemic
14th century	The Bubonic Plague was at its worst during this period

UN involvement, Relevant Resolutions, Treaties and Events

- A resolution by the General Assembly stating “its commitment to international cooperation and multilateralism and its strong support for the central role of the UN system in the global response to the coronavirus disease 2019 (COVID-19) pandemic” 2 April 2020
(A/RES/74/270)
- The Emergency Response Framework (ERF) is a guide for disaster response, created by the WHO in 2013 and revised in 2017.
- Seventy third World Health Assembly (WHA73.1), in which the history of COVID measures and action plans were discussed, as well as hopes for the future were expressed. 19 May 2020

Evaluation of Previous Attempts to Resolve the Issue

In the International Health Regulation (IHR, 2005) the role of Member States and the WHO in upkeeping global public health security are outlined. The regulations define terms and set out rules and obligations countries must oblige with. (See appendix)

The World Health Organization created an Emergency Response Framework (ERF) in 2013. It's been proven to be detailed and effective.

With recent technological developments, many countries have invested in screening as an additional measure against the spread of COVID-19. This being a fairly recent implementation, it had not been proven to be effective in earlier (e)pandemics. "The WHO commissioned a rapid review of evidence using a systematic approach to collecting studies available up to 13 November 2020 on the public health effectiveness and impact of symptom/exposure-based screening of international travellers. ... The review found one modelling study reporting that global implementation of screening measures would reduce the number of cases exported per day by 82%. Four modelling studies predicted delays in epidemic development, although there was wide variation between the studies in the results obtained. Four additional modelling studies predicted that the proportion of cases detected would range from 1% to 53%"

Many social media platforms have tried to limit misinformation by flagging all COVID-19 related posts, and sometimes providing links to reputable sources to debunk any misinformation. These platforms also try to encourage practicing safety measures by creating enticing applications available on their apps.

Due to the unfair distribution of vaccines, the initiative COVAX tries to secure vaccines and testing for poorer economies. The initiative, however, only covers up to 20% of each country's population. Furthermore, the delivery of vaccines can be a timely process, especially if the deliveries get postponed due to a demand in rich countries.

One World: Together At Home was an online event endorsed by famous celebrities and led by Global Citizen. It raised \$127.9 million total, providing money to the COVID-19 Solidarity Response Fund and local and regional responders.

Possible Solutions

We have experienced many pandemics and disease outbreaks. Every time we learn new lessons on how to be better prepared for the inevitable, next outbreak. Although the ERF and IHR have both been very useful, they miss a few key points. History has taught us that usually by the time reports of an outbreak are announced, it is too late to stop the spread from leaving the epicenter. It is therefore important that all countries communicate their findings in a timely manner. A big issue in the statistics however, is that they are not always accurate. Many nations do not have the proper



resources for widespread testing, so the amount of people who are infected but are asymptomatic, go under the radar. In reality, the amount of sick people in statistics, for example, the coronavirus, is much higher than documented. The lack of widespread testing also means more people will get sick because of all the infected people walking around spreading diseases. Another issue surrounding testing is that when it is available it's largely directed towards those with symptoms, instead of also acknowledging the risk of asymptomatic people. Regular testing, regardless of symptoms, could improve surveillance, as well as statistics. Many schools all over the world have decided (either independently or through government policy) to implement mandatory weekly self tests to better surveille the spread of COVID-19.

When looking at past pandemics and the role science and medicine has played in them is undeniable. Vaccines and medical treatments have shown to decrease the amount of infected people. It takes time and effort to create adequate vaccines and treatments. It also takes a lot of money and resources. Therefore, having a committee of virologists and epidemiologists with proper sufficient funding already in place before the outbreaks, would be vital in stopping the spread as fast as possible.

However a vaccine isn't a complete quick fix. There are issues with VOC, some of which are growing to be resistant against the currently available vaccines. Vaccine manufacturers are working on researching the variants and updating vaccines. It is vital to not only properly fund this, but also carefully explain the need for potential extra vaccinations against VOC. In doing this we need to keep in mind nations who have yet to receive vaccines, to foster equality for all people. The availability of vaccines should not be tied to how many funds a country has. Furthermore, we need to implement measures to protect poor countries against exploitation by vaccine diplomacy; nations who try to use their stock of vaccines as a political maneuver.

It is important we take the time to analyze all the statistics that have come forth from our most recent pandemic. Though it is still in full blow, some countries have handled the pandemic very well. Some manage to almost fully eliminate the virus from their country. Obviously, the additional measures these countries have used have been proven to be quite effective. We should carefully examine and take an example from these measures when preparing for future pandemics.

With the rapidly changing modern world comes the danger of pandemics starting faster and faster. Potential new dangerous situations and scenarios arise constantly. Some will be so new that we wouldn't be at all prepared if they were to come true. We should strive to always be ahead of such



predicaments. A committee that meets and discusses new inventions and information and revises old preparation plans, seeing to that they don't get outdated.

Humans by nature are social beings. Many governments have imposed lock downs and urge staying home, but for many the lack of social contact for extended periods of time has proven to be quite difficult. In some countries a series of protests have started against the corona measures. People don't social distance in these protests and often don't wear masks, which puts more and more people at risk. Government officials should create better ways to enforce the rules of the measures, as well as work on prevention of spread in the first place. For example, New Zealand only had 6 cases of the COVID-19 virus when they imposed some of the strictest lockdown measures in use in the world. The early catch is what gave the country a head start in limiting the spread of the disease. The earlier you catch an outbreak, the earlier you can limit spread. This is also a reason why nations should invest into better surveillance and personal protective equipment.

Misinformation is a very powerful, but also a very dangerous tool. False information, conspiracy theories and statistics have been surfacing the media. In some cases, they enforce fear, and in others they make people underestimate the dangers of diseases. The latter is one of the reasons that fuel the ongoing protests. Governments should work together to combat the spread of misinformation and the fear that goes along with it. The false news is currently also fueling racism towards Asians. In the future new pandemics can fuel xenophobia and racism as well. Some political leaders haven't been helping this situation either. The best thing to prevent backlash is to keep the public well informed, coming from trustworthy, reputable (government) sources, as well as vigorously refuting false information that fuels hate and fear.

Investing in prevention technology and personal protective equipment (PPE) is vital. Recent events have shown that people are prone to panic buying and hoarding PPE, creating a shortage for others. Prices for PPE have also significantly gone up, making it harder for some to access them. Some governments have opted to send out free masks to their citizens. Masks not only protect the people wearing them, but also the people the wearers come in contact with. In some countries these are used all the time, regardless if there's a disease outbreak or not. This is a good personal hygiene practice and promoting this would be beneficial for the overall public health. PPE is very important and vital in keeping citizens safe. Therefore investing in it and distributing them during the next outbreak, without having to fear a shortage would be a smart move.

Moreover, we have now seen how truly beneficial technology can be during a pandemic. China has advanced facial recognition software, cameras with thermal sensors, to determine if someone's running up a fever, drones meant to usher people inside and AI with various different capabilities.



These innovations are quite useful and would make a great change if they were employed all over the world. Especially with technology always being in a developing stage, with more research in a few years these technologies can be widely used with even more functions.

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Appendix or Appendices

https://www.who.int/hac/about/erf_.pdf

