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Kylie Henley Professor Whitehead Class 23575 October 24th, 2024

The COVID-19 Virus

The coronavirus, also known as SARS-CoV-2, that caused the COVID-19 pandemic, was believed to have originated from an animal in Wuhan, China. The virus had then spread to every country around the globe, causing a worldwide pandemic. The pandemic was a global threat to people, education, healthcare, and to economics. In the next few paragraphs, I will be covering what caused the pandemic, COVID-19 symptoms, diagnosis, prevention, & treatment, and how the pandemic affected the world.

Let's begin with what the COVID-19 virus is and how it originated. The coronavirus outbreak was first discovered in Wuhan, China back in 2019. The National Foundation of Infectious Diseases stated, "On March 11, 2020, the World Health Organization characterized the outbreak as a pandemic". "COVID-19 is a contagious disease caused by the SARS-CoV-2 virus". SARS-CoV-2, also known as severe acute respiratory syndrome, is a part of a large family of viruses, also known as coronaviruses, which can infect people along with some animals. This virus spread through human-to-human contact or by touching a surface with the virus on it. The National Library of Medicine PMC PubMed Central stated, "In this global pandemic of SARS-CoV-2, five mainly mutated strains have emerged, namely alpha, beta, gamma, delta and omicron. In July 2020, the first discovered spike protein (S protein) mutation D614G swept the world. Two months later, the variant alpha strain was discovered in the United Kingdom. While beta variant was discovered in December 2020 in South Africa, gamma variant in January 2021 in Brazil, delta variant in the United Kingdom in March 2021, and omicron variant in November 2021 in the Botswana were discovered. By 10 July 2022, 551 million cases had been confirmed in more than 194 countries, with more than 6 million fatalities and the daily infections continue to rise rapidly". The NFID (National Foundation for Infectious Diseases) declared "More than 1 million people have died from COVID-19 in the US since the virus first emerged in Wuhan, China in December 2019. On March 11, 2020, the World Health Organization characterized the outbreak as a pandemic".

As the virus quickly spread, many feared being around others or leaving their house.

Along with fearing the symptoms since some of the symptoms mimic a cold or the flu. These symptoms include fever, cough, headache, runny nose, and sore throat. Some of the serious illnesses caused by COVID-19 include pneumonia or bronchitis, which was more common for people with heart and/or lung diseases, weak immune systems, infants, and seniors. To be diagnosed, there are two kinds of tests that could be done. As stated by the American Lung Association, "The first test is for current infection, which was known as the viral test, where the inside of your nose was swabbed and then tested for current infection. Depending on where you were tested, the test results could take anywhere from a few minutes to several days. A bit further into the pandemic, rapid tests were then sold at most stores. Rapid tests are tests that can be taken at home where you swab the inside of your own nose and add the swab to a liquid saline solution, which then gave you your test result. The second type of test is preformed to detect past infection, which is known as an antibody test. An antibody test is done by getting your blood drawn and having it tested for COVID-19 antibodies. An antibody test cannot determine current infection, only past infection, since it can take up to three weeks for your body to make the antibodies." The NFID put out a list of preventions to take to prevent getting COVID, here is what was posted on their website nfid.org

Get vaccinated

Wash your hands with soap and water for at least 20 seconds Avoid touching your eyes, nose, or mouth Cover coughs and sneezes with a tissue Clean and disinfect objects and surfaces Avoid close contact with people who are sick and stay home if you are sick Wear a face mask

Take steps for cleaner air, such as opening windows or going outdoors.

Coronaviruses (COVID-19), The National Foundation for Infectious Diseases. By following these protocols, you had a lower chance of contracting COVID-19. If you were to contract COVID-19, there are a few different forms of treatment depending on the severity. For most cases doctors usually advised you to take pain & fever medication, use a humidifier, take hot showers, drink plenty of liquid to avoid becoming dehydrated, quarantine, and get plenty of rest. For severe cases, individuals were hospitalized and treated accordingly. However, sadly treatment didn't work for everybody, which caused many people to pass away.

Due to the worldwide pandemic, the world was greatly affected. One of the ways the globe was affected included drastic life loss. The pandemic had killed close to sixteen million people worldwide during 2020 and 2021. Other ways included unprecedented

changes to food systems and the world of work. The World Health Organization put out an article in October of 2020 about the impact of COVID-19 on people's livelihoods, their Henley 3

health and our food systems. Within that article, they had stated, "Tens of millions of people are at risk of falling into extreme poverty, while the number of undernourished people, currently estimated at nearly 690 million, could increase by up to 132 million by the end of the year. Millions of enterprises face an existential threat. Nearly half of the world's 3.3 billion global workforce are at risk of losing their livelihoods. Informal economy workers are particularly vulnerable because the majority lack social protection and access to quality health care and have lost access to productive assets. Without the means to earn an income during lockdowns, many are unable to feed themselves and their families. For most, no income means no food, or, at best, less food and less nutritious food". During the pandemic the boarders closed, which impacted us greatly. Buying and selling produce and other goods became sparse, and trading became restricted. Even our healthcare systems were severely impacted. Healthcare workers were overworked, which led to many workers passing out or work on little-to-no sleep, and our healthcare supplies ran low, causing many individuals to not receive the care they needed. Overall, every part of the globe was affected.

In conclusion, COVID-19 a global pandemic that ravaged the globe, which to this day, the world has continued to try to recover from its severe consequences, including how many people lost their jobs which may have led them to lose family members or their property. The rapid spread of COVID-19 exposed many vulnerabilities within the global systems, like our healthcare systems, where healthcare workers were overworked, and our supplies ran low. By also acknowledging the origins of COVID-19 and addressing the underlying factors, we can work towards a future where pandemics are prevented, or at the very least, quickly contained. Therefore, the world must take proper precautions when it comes to preventing diseases from spreading.

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