Analysis of factors and Impacts of Covid-19 pandemic in Massachusetts

Sebastian De Jesus Sanchez Capellan¹, Timothy Randhir²
1. Student, Springfield Technical Community College, Springfield, MA
2. Mentor: Professor, Springfield Technical Community College, and University of Massachusetts-Amherst

Introduction

Human society faces multiple threats for survival, with viruses being critical. New viruses require development of vaccines, treatments, and medical care. This is complicated as scientists need time to develop vaccines and treatments. On December 2019, a new virus by name was detected in Wuhan province of China. The virus can spread from person to person, and has spread throughout the world as pandemic. Its symptoms range from mild to more complicated illnesses and many cases results in death. There is a need study the nature of the pandemic and evaluate the impacts to communities. This is the focus of this study.

Background

During the end of 2019 and the beginning of 2020, multiple human cases of novel coronavirus infection were reported in the Huanan Seafood Wholesale Market (South China Seafood City Food Market) of Wuhan, China. On January 7, 2020, the virus was identified as a novel coronavirus and officially named by the WHO as 2019-nCoV, standing for novel coronavirus of 2019. The novel coronavirus outbreak (COVID-19) rapidly spread across the globe. Within 2 months since the outbreak was first reported on December 31, 2019, a total of 566 Severe Acute Respiratory Syndrome (SARS-CoV-2) cases have been confirmed in 26 countries. Most countries around the world have taken action such as social distancing, handwashing, and wearing a mask to mitigate the spread of COVID-19. Governments are unable to minimize both deaths from coronavirus disease 2019 (COVID-19) and the economic impact of the pandemic. Keeping mortality as low as possible is the highest priority of health officials while taking measures to ameliorate the inevitable economic downturn.

Result and Discussion

Covid-19 (Coronavirus) started in China 2019, it is a pandemic which is spread by person to person through respiratory droplets. There is no specific treatment for Coronavirus disease. Most vulnerable people to Coronavirus are the elderly, and people with lung disease, therefore, governments have implemented methods to avoid infection by wearing a mask that covers nose and mouth, washing hands, and social distancing. Keeping people indoors can lead to depression, and others might lose their jobs due to the social distance policy. Finding a vaccine for Covid-19 is a challenge facing scientists to avoid the spread of the disease. Meanwhile, people will have to get used to wearing masks at public places at all times, and understand the importance of washing hands.

Acknowledgement

I would like to thank DHE and Dr. Reena Randhir, Director of the STEM Starter Academy for support and encouragement.