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**HISTORY OF PANDEMIC OCCURRENCE AND OUTBREAKS:
FROM THE BLACK DEATH TO COVID-19 (SARS-CoV-2)**

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Nowadays, the word 'pandemic' is, unfortunately, not a sign of novelty. According to the WHO definition, a pandemic is an epidemic of an infectious disease that has spread across a large region, for instance multiple continents or worldwide, affecting a substantial number of people. A disease or condition is not a pandemic merely because it is widespread or kills many people; it must also be infectious, thus not every disease reaches the status of pandemic.

The objective of this study is to accumulate and analyze present data on the known pandemic outbreaks throughout centuries and to theorize on the current situation with COVID-19 and anticipate the progress, results and the aftermath of this particular disease.

The infectious diseases are ancient and date back to at least 5th century B.C. (Plague of Athens, the earliest recorded instance of pandemic, covered the territories of Libya, Ethiopia, Egypt and Greece, killed two thirds of the Athens population). With the mankind progress and cultural developments such as travelling, trading, farming, domestication of animals, etc. the infectious diseases have learned to mutate and spread worldwide, causing more severe and devastating strains to occur. This resulted into solemn statistics that nothing has killed more people than the viruses, bacteria and parasites that cause disease. For example, the plague of Justinian (6th century) killed approximately 50 million people, which sums up half of the world's population at that time; the Black Death (14th century) has taken up to 200 million lives; smallpox (20th century) ended 300 million people; the mortality rates of the 1918 influenza pandemic or the so called Spanish flu vary from 50 to 100 million - numbers that surpass the death toll of World War I, which was being fought at the same time.

On the other hand, pandemics shaped our history and accelerated our achievements in many fields. One of the most recent breakthroughs, is that the pandemic of Covid-19 despite its negative effect on global economy, leaves a profound impact on emissions of pollutants and greenhouse gases and the reduction of air pollution in general. Thus, decreasing one of the eminent problems in the last 5 years. Moreover, due to numerous cases throughout history the government now has basic strategies perfected over centuries in managing future outbreaks, i.e. containment and mitigation. Another strategy, suppression, requires more extreme long-term non-pharmaceutical interventions so as to reverse the pandemic by reducing the basic reproduction number to less than 1. The suppression strategy, which includes stringent population-wide social distancing, home isolation of cases, and household quarantine, was undertaken by China during the COVID-19 pandemic where entire cities were placed under lockdown, but such strategy carries with it considerable social and economic costs.

Although, pandemics have succeeded in decreasing human civilizations through history, they have brought several benefits afterwards, namely, a stark progress in culture and society, improvement of water and sanitation systems and revelations that led to innovations in limiting disease spread (Cholera spread limitations), as well as treatments and vaccines (eradication of smallpox). Furthermore, the history proving that human beings have mastered the art of adaptation and that even the current situation with Covid-19 or its scientific name SARS-CoV-2 cannot be as dire as we deem at this particular moment.