Project "Covid-19"

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Our project focuses on the Covid-19 outbreak.

We have seen outbreaks of SARS- CoV-1 (2002-2004), Influenza A (2009), MERS CoV Infection (2012 and ongoing), Ebola Virus Pandemic (2016-2016), Zika Virus (2015), and SARS-CoV2 Pandemic (2020-2024).

Source: Viral Pandemics in the Past Two Decades: An Overview   
Authors: Bhadoria, Pooja; Gupta, Gaurisha; Agarwal, Anubha

Link: <https://journals.lww.com/jfmpc/fulltext/2021/10080/viral_pandemics_in_the_past_two_decades__an.5.aspx>

We presume that governments and humans in their countries did not work in lock-step - meaning that the impact of SARS-CoV2 (Covid-19) has affected populations in different ways.

Some countries and regions are wealthier than other countries. This may have had an impact on cases that would have required hospitalization up to ICU levels. Vaccines took some time to be mass-produced, and not all vaccines were as impactful than other vaccines. Testing for Covid and taking measures to decrease the risk to catch the disease (e.g., face masks).

We aim to understand which measures worked well (fewer deaths per capita, fewer cases to be treated in the hospital and ICUs).

In our work, we focus on comparisons for select countries. The research approach is to work with field study, comparing similar countries, or less similar countries. If possible, we would seek indications on which vaccines worked better. (This may be a long stretch, no promises.)

Data we may focus on...

* Wealth of a country
* Tests for Covid-19
* Cases (e.g., a positive test result)
* Deaths
  + hospitalizations (without ICU)
  + hospitalizations (with ICU)
  + outside hospitals
* Excess Mortality (more deaths than expected before Covid-19)
* Vaccination (based on comparison of different vaccines of different countries, positive test cases and vaccinations relation, and age group)

Some of these data points are, like Excess Mortality, are discussed with experts' views

disagreeing. Data we use are best-guesses, but it may still deliver reliable and valid thoughts.

The data we will be using in our study are from:

* <https://ourworldindata.org/coronavirus>
* <https://github.com/owid/covid-19-data/tree/master/public/data>