

Regression Analysis on COVID, Health, and Population Metrics

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We can answer multiple questions using regression analysis of the covid data. The statistical relation between total death in a country and various parameters like vaccination, age, population, etc using regression analysis of the covid dataset. For example, We could find the correlation between total death due to Covid in a country and number of vaccinated people.

This dataset includes data on confirmed COVID cases, deaths, hospitalizations, testing, and vaccinations across several countries since January 4, 2021. The goal of this project is to explore how a the number of new vaccinations varies with respect to other measures over time and across different counties.

Where the data came from

An individual observation corresponds to the number of new covid cases, total number of covid cases, total number of death, and other covid, health, and population related metrics for a country in a single day since January 4, 2021.

We could select multiple combinations of responses and observations to do a regression, so there doesn't need to be a specific response. However, we will focus on the total number of deaths/cases as well as total number of new deaths/cases

Our covariates are: days after January 4th, 2021; new tests; total tests; positive rate; tests per case; total vaccinations; people vaccinated; people fully vaccinated; new vaccinations; population; population density; median age; percentage of population aged over 65/70; GPD per capita; cardiovascular death rate; diabetes prevalence; female smokers; male smokers; hospital beds per thousand; life expectancy; human development index; stringency index.

The number of observations is 1107

Fig1: Histogram of New death due to COVID

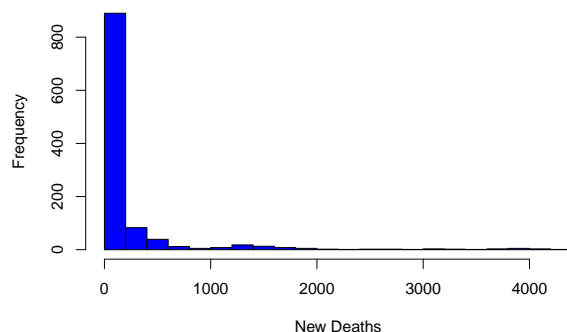


Fig2: Histogram of Total death due to COVID

