

# Estimating Covid-19 Deaths by Using Binomial Model

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**Abstract:** Coronavirus disease 2019, also known as Covid-19, is an infectious disease that has infected more than eight million people all around the world. This virus is a member of coronavirus family but it is the most mortal one [1]. It has named as 2019-nCoV by WHO after CDC discovered a new coronavirus from a swab sample of a patient. As we know this pandemic started December 2019 in China, and it is still spreading and causing deaths all around the world [2].

In this paper, we aimed to estimate the right size of epidemic. For that purpose, we chose 10 countries, which are affected by, and still fighting with this disease, to forecast the upcoming death rates by using the previous week deaths. These 10 countries are Argentina, Austria, Brazil, France, Iran, Italy, Sweden, Turkey, United Kingdom, and United States of America. We used the death data of World Health Organization with assumption that data is accurate. For this estimation, we used binomial distribution and lastly, we compared our estimations with real data.

**Keywords:** Coronavirus disease 2019, SARS-CoV-2, Binomial Distribution, Gamma Distribution, Deaths

**2010 Mathematics Subject Classification:** 46N30, 46L53, 97M10

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