

A Statistical Analysis on the Comparison of First and Second Waves of COVID-19 and Importance of Early Actions in Public Health for Third Wave in India

Authors : Maitri Dave

Abstract : Coronaviruses (CoV) is such infectious virus which has impacted globally in a more dangerous manner causing severe lung problems and leaving behind more serious diseases among the people. This pandemic has affected globally and created severe respiratory problems, and damaged the lungs. India has reported the first case of COVID-19 in January 2020. The first wave of COVID-19 took place from April to September of 2020. Soon after, a second peak is also noticed in the month of March 2021, which in turn becomes more dangerous due to a lack of supply of medical equipment. It created resource deficiency globally, specifically in India, where some necessary life-saving equipment like ventilators and oxygenators were not sufficient to cater to the demand-supply ratio effectively. Through carefully examining such a situation, India began to execute the process of vaccination in the month of January 2021 and successfully administered 25,46,71,259 doses of vaccines till now, which is only 15.5% of the total population while only 3.6% of the total population is fully vaccinated. India has authorized the British Oxford–AstraZeneca vaccine (Covishield), the Indian BBV152 (Covaxin) vaccine, and the Russian Sputnik V vaccine for emergency use. In the present study, we have collected all the data state wisely of both first and second wave and analyzed them using MS Excel Version 2019 and SPSS Statistics Version 26. Following the trends, we have predicted the characteristics of the upcoming third wave of COVID-19 and recommended some strategies, early actions, and measures that can be taken by the public health system in India to combat the third wave more effectively.

Keywords : COVID-19, vaccination, Covishield, Coronavirus

Conference Title : ICBTD 2022 : International Conference on Biomedical Device and Technology

Conference Location : Miami, United States

Conference Dates : March 11-12, 2022