

Effects of temperature on COVID-19 transmission in India

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ABSTRACT

This paper aims to study the correlation between COVID-19 and temperature in India. Secondary published data from different websites is employed by us. The climate indicators included within the study are maximum temperature, minimum temperature. Correlation tests were chosen for data analysis. We find that maximum temperature has significant relations related to the COVID-19 pandemic and the study will help health regulators to combat COVID-19 in India.

Key words : COVID -19, Maximum temperature, Correlation, India

Introduction

Novel Corona Virus (COVID-19), is related to the respiratory disease in humans which has been declared as a worldwide epidemic and pandemic within the half-moon of the year 2020 by the planet Health Organization (<https://www.who.int/novel-coronavirus-2019>). People with low immunity, old age, immunocompromised and medical problems specially associated with lungs, diabetes, cardiac related problems are more susceptible to Covid 19 disease. The symptoms are cough, cold, breathing problem very almost like flu. Exact transmission route of COVID-19 is yet to be identified; it had been transmitted mainly by respiratory droplets in humans (Ge *et al.*, 2013; Huang *et al.*, 2020). Climate factors includes wind speed, humidity, temperature (Yuan *et al.*, 2006; Dalziel *et al.*, 2018; Bashir *et al.*, 2020). Bull (1980) reported that

pneumonia's death rate is very much correlated with weather changes. Preventive measures are to guard oneself by washing hands frequently, avoiding touching the mouth, nose, and face, and by maintaining social distancing (1 meter or 3 feet) with people. it's reported that there are two important stages of Covid 19; stage-II and stage-III. In stage-II, there's person-to-person transmission and in stage-III, there's a community transmission. the primary case of Covid 19 was reported in India on 30 January 2020, originating from China. At most after two months this disease spread in most parts of India. Majority of Nations of world have noticed an enormous number of Covid 19 cases from December 2019 onwards. WHO acknowledged Indian strategies to control the outbreak of this epidemic (Sharma, 2020). India accounts for nearly one-fifth of the world's population and is second leading country in terms of population within the world.

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