## **CAPSTONE PROJECT - MAJOR PANDEMIC OUTBREAK:**

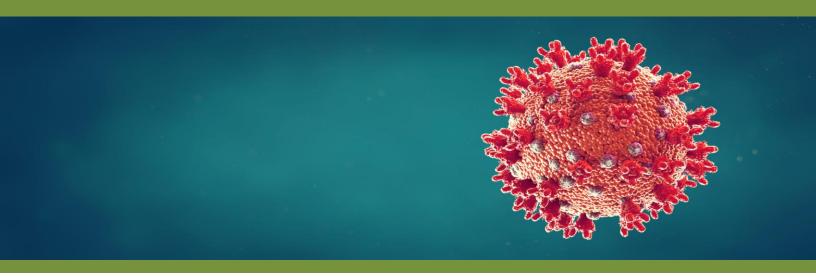
## **INDIA'S BATTLE AGAINST COVID-19**

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# 1.INTRODUCTION



#### 1.1 GENERAL

The COVID-19 pandemic in India is part of the worldwide pandemic of corona virus disease 2019 (COVID-19) caused by severe acute respiratory syndrome corona virus 2 (SARS-CoV-2). The first case of COVID-19 in India, which originated from China, was reported on 30 January 2020. India currently has the largest number of confirmed cases in Asia. India's case fatality rate is among the lowest in the world at 2.41% as of 23 July and is steadily declining. As of 24 May 2020, Lakshadweep is the only region which has not reported a case. India's recovery rate

stands at 63.18% as on 23 July 2020. On 10 June, India's recoveries exceeded active cases for the first time.

In March, after the lockdown was imposed, the United Nations (UN) and the World Health Organization (WHO) praised India's response to the pandemic as 'comprehensive and robust,' terming the lockdown restrictions as 'aggressive but vital' for containing the spread and building necessary healthcare infrastructure. India surpassed Russia as the third worst-hit country by COVID-19 after its case tally crossed 6.9 lakh on Sunday, according to statistics aggregator Worldometer, with several states recording their highest single-day spike.



Image 1.1 - COVID-19 Role in the World.

Russia has 6,81,251 infections while Brazil has 15,78,376 and the US has 29,54,999 cases, according to Worldometer which compiles the COVID-19 data from around the globe. Karnataka has announced a full shutdown barring essential services on Sundays till August 2. Roads wore a deserted look, people stayed indoors and all commercial activities came to a grinding halt on the first such weekly shutdown.

In the past years, India has emerged as a significant vaccine manufacturing hub and Indian manufacturers account for 60 per cent of vaccine supplies made to UNICEF.

#### **1.2 GOVERNMENT FACILITIES**

In the national capital, the 10,000-bed Sardar Patel COVID care centre, touted as "one of the largest" facilities in the world, was inaugurated. The facility has been constructed in just 12 days near the Indira Gandhi International (IGI) airport on a piece of land belonging to the Ministry of Defence. The home minister said Prime Minister Narendra Modi is fully committed to helping the people of Delhi in these challenging times and this COVID hospital, yet again, highlights that resolve. "The vaccine for the novel corona virus may be developed anywhere in the world, but

without Indian manufacturers involved the production of required quantities is not going to be feasible,".



Image 1.2 - Children Playing with Safety Precautions

The ongoing COVID-19 pandemic has created havoc across the world, putting extraordinary pressure on not just public health systems, but also on crisis communications. With social media being the primary medium for information consumption, clear, end-to-end crisis communication with diverse target groups becomes key in dealing with such a pandemic. On 11 March 2020, the World Health Organization's (WHO) declared COVID-19 a pandemic as the number of cases worldwide had surged 13-fold. At that time, only 62 cases were reported in India, a mere 0.05 percent of the global count. While many European countries and the WHO had understood the severity of the crisis and the need to combat the situation, India was still sitting on the fence trying to play defensively, biding time before facing the avalanche.



Image 1.3 - Mask in Public

With about 736 districts in 28 states and eight union territories, and varied shades of dialects and cultures within the states, crisis communication in India becomes a complex exercise. It not only has to address 1.3 billion citizens, but it also has to chalk out customized, tailor-made crisis communication plans for every state and sections of the society, especially the poor and marginalized.

In the initial days of the outbreak in India, the early affected states prepared their own state-specific response, while New Delhi was still unsure of a nationwide strategy. Clearly, coordination between the states and the centre could have been better. While the state government had started imposing statewide curfews by invoking section 144 of the Criminal Procedure Code (CrPC), a clear direction from the centre only came on 19 March when Prime Minister Narendra Modi called for a 'Janta Curfew' to be observed on 22 March.



Image 1.4 - Coronavirus Safety Precautions Paintings for Awareness in India

The efficacy of any crisis communication strategy, especially during public health disasters, depend equally on the accuracy of information disseminated and also its inclusivity. The emergence of COVID 19 in India has raised the alarm and exposed the loopholes not only in the public healthcare sphere, but also in the allied legal frame work pertaining to risk communication and crisis management. The government has enforced the lockdown under the provision of the colonial Epidemic Disease Act, 1897 and the more recent National Disaster Management Act, 2005. However, both these acts do not elaborate explicitly on crisis communications, one of the most important tools of crisis management in such times. But these legislations need to be urgently amended and expanded to chart out a national crisis management framework, keeping in mind the exponential growth of digital communication channels.

Though being highly populated the relative confirmed cases of India is low compared to other countries. This could be because of two reasons:

- 1. 21 day lockdown imposed by prime minister Narendra Modi (Source: <u>Health Ministry</u>)
- 2. Low testing rate (Source: <u>news18</u>)

It sates, "Develop early warning systems that are people centered, in particular systems whose warnings are timely and understandable to those at risk, which take into account the demographic, gender, cultural and livelihood characteristics of the target audiences, including guidance on how to act upon warnings." Similar broad and all-encompassing guidelines needs to be embedded in the legal framework in order to make it more contemporary.

#### 1.4 CORONA VIRUS MYTH BUSTERS

- a) Studies show hydroxychloroquine does not have clinical benefits in treating COVID-19.
- b) The likelihood of shoes spreading COVID-19 is very low.
- c) People should NOT wear masks when exercising, as masks may reduce the ability to breathe comfortably.
- d) The coronavirus disease (COVID-19) is caused by a virus, NOT by bacteria.

- e) The prolonged use of medical masks when properly worn, DOES NOT cause CO2 intoxication nor oxygen deficiency.
- f) Most people who get COVID-19 have mild or moderate symptoms and can recover thanks to supportive care.
- g) Drinking alcohol does not protect you against COVID-19 and can be dangerous.
- h) Thermal scanners are effective in detecting people who have a fever (i.e. Have a higher than normal body temperature).
- There are currently no drugs licensed for the treatment or prevention of COVID-19.
- Adding pepper to your soup or other meals DOES NOT prevent or cure COVID-19.
- k) COVID-19 is NOT transmitted through houseflies.
- I) Spraying and introducing bleach or another disinfectant into your body WILL NOT protect you against COVID-19 and can be dangerous.
- m) Drinking methanol, ethanol or bleach DOES NOT prevent or cure COVID-19 and can be extremely dangerous.
- n) 5G mobile networks DO NOT spread COVID-19.
- o) Exposing yourself to the sun or temperatures higher than 25°C DOES NOT protect you from COVID-19.
- p) Catching COVID-19 DOES NOT mean you will have it for life.
- q) Being able to hold your breath for 10 seconds or more without coughing or feeling discomfort DOES NOT mean you are free from COVID-19.
- r) Cold weather and snow CANNOT kill the COVID-19 virus.
- s) Taking a hot bath does not prevent COVID-19.
- t) The COVID-19 virus CANNOT be spread through mosquito bites.
- u) Hand dryers are NOT effective in killing the COVID-19 virus.
- v) Ultra-violet (UV) lamps should NOT be used to disinfect hands or other areas of your skin.
- w) Rinsing your nose with saline does NOT prevent COVID-19.
- x) Eating garlic does NOT prevent COVID-19.
- y) People of all ages can be infected by the COVID-19 virus.

#### 1.3 OBJECTIVES

- 1. To spread awareness among the citizens of India.
- 2. To evaluate the daily crisis due to COVID-19.
- 3. To examine the presently available COVID-19 data for India.
- 4. To Examine the deadly corona virus spread among the citizens and community.
- 5. To provide better methods for estimates that can assist medical and governmental institutions to prepare and adjust as pandemics unfold.
- 6. To analyze total number of cases in India with the help of Python Data Visualization.