

DISTRIBUTION OF COVID 19 IN INDIA: A GEOGRAPHICAL ANALYSIS**Mr. Deepak S. Narkhede***Changu Kana Thakur Arts, Commerce and Science College, New Panvel, Navi Mumbai,***Abstract**

Coronavirus or Covid-19 is an infectious disease spreading very rapidly in densely populated the countries. India. The large size countries need to observe the distribution pattern of this disease to apply the measures. In this paper an attempt has been made to study the distribution of Covid 19 in India. This paper is based on secondary data. The collected data is tabulated and interpreted with the help of statistical and cartographic techniques. The distribution of Covid 19 is found uneven in India.

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Introduction:

COVID-19 is an infectious disease caused by a newly discovered coronavirus ¹. This virus spreads through individuals to other individuals, the virus can spread from an infected person's mouth or nose in small liquid particles when they cough, sneeze, speak, sing or breathe. Many countries around the world simultaneously ask their people to apply social distance, even physical distance to prevent the growth of COVID 19. In an effort to prevent the spread of Covid-19, WHO recommends stopping activities that have the potential to cause mass crowds. The countries like India having larger population needs to study the pattern of Covid 19 cases to apply the measures as per the pattern.

Objectives:

- i) To study the geographical distribution of Covid 19 in India
- ii) To investigate the causes for spreading of Covid 19 India
- iii) To study the status of measures taken for Covid 19.

Database and Methodology:

The present study is based on secondary sources. The data is collected from the WHO and the website of Government of India. The data is collected up to 20th March 2022. The collected data is tabulated and interpreted with the help of statistical and cartographic techniques.

Data Analysis:

India ranked second in Covid 19 cases and number of deaths in the world. India has total 43061256 Covid 19 cases up to 20th March 2022 and 516776 deaths. The average death in India is 1.20 percentage. The distribution of spreading of Covid 19 cases in uneven in India. Table 1 shows the zone wise distribution of

Covid 19 cases and number of deaths in six zones of India. The highest numbers of Covid 19 cases found in south zone of India with 17208402 number and ranked second zone in terms of number of deaths. It has an average of 0.96 percentage deaths in India. The west zone consists of four states and one union territory is second in terms of numbers of Covid 19 cases and highest in number of deaths with highest average percentage of 1.58. The north zone accounts 16.46 percentage of Covid cases and 1.37 percentage average deaths in India. These three zones covers total 80.82 percentage of Covid 19 cases in India. The east zone ranks fourth with 4585029 Covid 19 cases and 48011 deaths with 1.04 percentage average deaths in India. The north east zone have 1482284 Covid 19 cases with 0.90 percentage average deaths. The central zone consists of only two states having lowest number of Covid 19 cases and number of deaths.

Table-1. Zone Wise Distribution of Corona Cases and Deaths in India

Zone	States/Union Territories	No. of Corona Cases	No. of Deaths	Average % of Deaths
South Zone	Tamilnadu, Karnataka, Telangana, Andhra Pradesh, Kerla, Lakshwadweep and Puducherry	17208402	166282	0.96
West Zone	Maharashtra, Gujrat, Rajasthan, Goa, Dadra Nagar, Haveli and Daman and Diu	10626441	168326	1.58
North Zone	Himachal Pradesh, Uttar Pradesh, Panjab, Haryana, Uttrakhand, Delhi, Jammu Kashmir, Ladaakhand Chandigarh	6969100	95940	1.37
East Zone	Bihar, Zarkhand, Orissa, West Bengal and Andaman and Nicobar Islands	4585029	48011	1.04
North East Zone	Assam, Arunachal Pradesh, Nagaland, Manipur, Meghalaya, Tripura, Mizoram, Sikkim	1482284	13449	0.90
Central Zone	Madhya Pradesh, Chhattisgarh	2190000	24768	0.54
Total		43061256	516776	1.20

Table 2 shows the first five states in India in terms of number of corona cases and deaths in India. Maharashtra in number one in corona cases and number of deaths in India followed by Kerla, Karnataka and Tamilnadu and Andhra Pradesh states. All the states are densely populated and it is one of the causes of spreading the corona cases in India. Five states of number of corona cases. Andhra Pradesh is ranked fifth in terms number

of cases but ranked ninth in number of deaths. The Delhi state ranked eighth in number of corona cases but ranked fifth in terms of deaths.

Table-2. First five States in Number of Corona Cases and Deaths in India

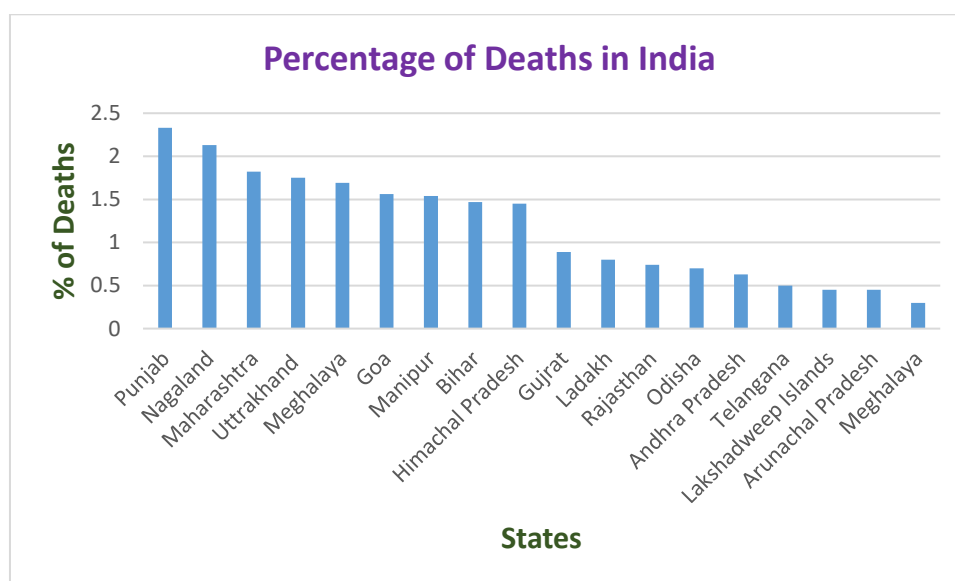
Sr. No.	States	No of Corona Cases	Sr. No.	States	No of Deaths
1.	Maharashtra	7870000	1.	Maharashtra	144000
2.	Kerla	6530000	2.	Kerla	67363
3.	Karnataka	3940000	3.	Karnataka	40039
4.	Tamilnadu	2450000	4.	Tamilnadu	38025
5.	Andhra Pradesh	2320000	5.	Delhi	26147

Table 3 exhibits the first ten states with highest and lowest percentage of deaths in India. Punjab has highest number of deaths in India with 2.33 percentage death rate. Nagaland, Maharashtra and Uttrakhand ranked second, third and fourth with 2.13, 1.85 and 1.75 percentage death rate respectively. Delhi ranked tenth with 1.29 percentage of death rate in India. Meghalaya is the lowest numbers of deaths due to Corona in India. Arunachal Pradesh, Lakshadweep island and Telangana state is less than 0.5 percentage of deaths in India and Andhra Pradesh, Odisha, Rajasthan, Ladakh, Gujrat and Tripura having death rate less than 1.0 percentage in India.

Table-2. First Ten States with high percentage and Low percentage of Deaths in India

Sr. No.	States with high percentage of Deaths		Sr. No.	States with low percentage of Deaths	
	States	% of Deaths		States	% of Deaths
1.	Punjab	2.33	1.	Meghalaya	0.30
2.	Nagaland	2.13	2.	Arunachal Pradesh	0.45
3.	Maharashtra	1.82	3.	Lakshadweep Islands	0.45
4.	Uttrakhand	1.75	4.	Telangana	0.50
5.	Meghalaya	1.69	5.	Andhra Pradesh	0.63
6.	Goa	1.56	6.	Odisha	0.70
7.	Manipur	1.54	7.	Rajasthan	0.74

8.	Bihar	1.47	8.	Ladakh	0.80
9.	Himachal Pradesh	1.45	9.	Gujrat	0.89
10.	Delhi	1.29	10.	Tripura	0.90



Measures taken to control the Covid 19 in India.

Government of India has developed Co-WIN portal providing the link www.cowin.gov.in and Aarogya Setu and Umang Apps for mobile users. The vaccination made compulsory for all Government employees and motivated the common people for vaccination. The vaccination is free at all Government hospitals. The vaccination drives are made by State Government and the local bodies at different places. The use of mask made compulsory people and the restrictions are made for gathering of peoples. The thermal checking and use of sanitizer is compulsory at schools, colleges, Government offices and public places. The thermal checking and testing of passengers made compulsory at air ports. The Indian government ordered the widespread lockdown for certain period. The different Ministries are ready to ensure the availability of essential medicines and other required material used in emergency. COVID-affected people were asked to be quarantined for 14 days. The emergency cell is made for Government to face the situation.

Conclusion:

India is the second largest country of Covid 19 cases in the world. The densely populated states is having high number of covid 19 cases. The mountains states and deserted are is having less number of corona cases in India. Government of India taking at most care to control the Covid cases in India.

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