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COVID-19 breakout: current scenario of India

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Abstract -A respiratory disease of coronavirus infection first occurred in Wuhan, Hubei Province, China and its spread across the world. The World Health Organization officially named as coronavirus. There are 4.2 Lakh mortalities and 3.17 crore people affected in India. Different effective measures are taken by the government to control the Covid 19. The country taken rigorous measures like special hospitals with special wards for covid patients, Vaccination, Laboratories and Quarantine facilities and making lock down to control the spread of Covid Virus. In this paper, we are spotify the government actions and treatments regarding Covid 19.

Key Words: Covid 19, India, Current Scenario, Treatment, Vaccination.

1.INTRODUCTION

In December 2019, a new coronavirus caused pneumonia in Wuhan, China, it spread across the world. The virus is to be natural and from an animal origin. This infection is spread entire world by human to human transmission and human to species transmission. The corona virus is majorly affect the human respiratory system. The World Health Organization (WHO) named this virus as CoronaVirus Disease (COVID -19) and announced as sixth public health of emergency services(SPHEC) on January 30,2020. The Disease Covid 19 caused by a new virus called SARS-CoV-2.

According to World Health Organization, 199,466,211 confirmed cases with 4,244,541 mortalities, also the vaccine given to 3,946,458,313 peoples. Highest number of cases encountered in America followed by Europe and South-East Asia. In India, the Ministry of Health and Family Welfare has increased the awareness about the recent epidemic and has taken needed steps to control the COVID-19 Virus. Both the governments are enchanting a number of measures and formulating numerous wartime protocols to reach this goal.

In India the first case is reported on January 30, 2020. At May 2, 2020 according to Government of India the new cases reported as 2,442 after that the cases are increased gradually during the first wave of Covid-19.It will get dropped on 11, Feb 2021. At 20, Feb 2021 the second wave of Covid started in India the cases are increased suddenly on 9, May 2021 there are nearly 9 lakh cases reported. In India, the highest number of cases encounter in Maharashtra followed by Kerla, Karnataka and Tamil Nadu. Early assessment of COVID-19 severity facilitates prioritize the patients and observe cases that are more likely to go down for timely intervention. It also facilitates them to sketch better hospital resources.

Government of India has established a COVID-19 Relief Fund to receive fund to establish quality treatment and

encourage research to beat coronavirus. To avoid the myth and doubts regarding Covid-19, the Ministry of Health and Family Welfare (MoH&FW) has introduced social network helpline number to clarify people's queries like report their symptoms, travel history, medical guidance and precautionary measures. Also this committee released a list of testing centers of state and union territory that involves both hospitals and laboratories.

- **1.1 Variants:** There are four variants identified related to COVID-19. They are Alpha, Beta, Gamma and Delta. Alpha increased the transmissibility rate and secondary attack rate, increased risk of hospitalization and mortality. Beta and Gamma- increased transmissibility. Delta- increased the transmissibility rate and secondary attack rate, similar transmissibility between vaccinated and unvaccinated individual and increased risk of hospitalization [7].
- **1.2 Treatment:** There is no specfic treatment for this coronavirus disease 2019. The treatments are like Fluid replacement – to increase the amount of fluid in our body, providing sufficient oxygen - for covid patient, the level of oxygen decreasing day by day. Most of the covid cases are mild, so for this medicine is paracetamol is enough. People with more severe case may need treatment in hospital, use of steroid hormones is necessary to avoid death. Also need ventilation support for severe patients. The person who unable to get adequate amount of oxygen they needed support from extracorporeal membrane oxygenation support.

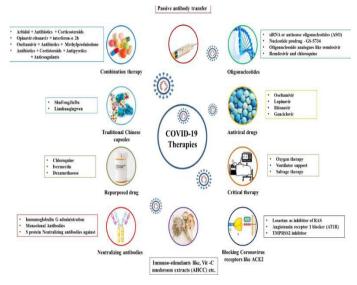


Fig-1: Treatment for Covid-19

1.3 Hospitals: In India total number of hospitals in public sector 25,778 hospitals with 7,13,986 beds(35,699 ICU beds with 17,850 ventilators) and the total number of hospitals in private sector 43,487 hospitals with 1,185,242 beds (59,262 ICU beds with 29,631 ventilators) and in total 69,265

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hospitals with 18,99,228 beds (94,961 ICU beds with 47,481 ventilators)[3,4]. The beds and ventilators in seven states – Uttar Pradesh (14.8%), Karnataka (13.8%), Maharashtra (12.2%), Tamil Nadu (8.1%), West Bengal (5.9%), Telangana (5.2%) and Kerala (5.2%). The strength of ICU is at 5% of hospital bed strength. 50% of ICU beds across both public and private sector are equipped with ventilators. The following Fig 1 & 2 gives the details about state wise hospital in public and private sector [6].

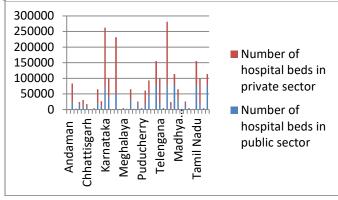


Fig - 2: State wise hospitals in public and private sector other than North side of India

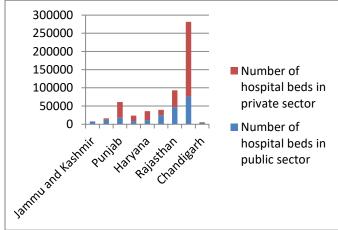


Fig-3: State wise hospitals in public and private sector in North side of India

1.4 Testing facilities in India: PCR test is used globally for COVID-19; it is easy and best method. Total Laboratories reporting to ICMR, Government labs: 637, Private labs: 240. Mostly three types of testing is followed in India. The total number of labs in India is 877.

Test Name	Number of labs in Government hospitals	Number of labs in Private hospitals	Total Number of Labs in both sector
Real Time RT PCR for COVID-19	343	181	524
TrueNat Test for COVID-19	269	14	283
CBNAAT Test for COVID-19	25	45	70

Table-1: Testing facilities in India

Current Situation in India: According to Government of India, there are total of 31,726,507 confirmed cases and mortality rate 425,195 on Aug 7,2021. The Highest cases appeared in Maharashtra (6,341,759) followed by Kerala (3,513,551), Karnataka (2,915,317) and Tamil Nadu (,2571,383). In India, the daily cases are around 30-40,000. In Comparison to previous week (15-21 july), it is less than 40%. The Discharged rate is 97.37% and the death rate is 1.34%. The total samples tested till date 47,65,33,650. The Total vaccination doses done in India is 5,01,009,609. Our Indian Government take preventive steps as Vaccine to improve immunity, face masks to avoid transmitting the disease, avoiding crowded places, Hand wash, maintaining social distance and Self isolation for people who travelled to any country. Following Table list the highest number of cases by district wise in India.

District	Last 7	Last	%
	days	8-14	increase/
	cases	days	decrease
		cases	
Malappuram	34,386	16,469	48
Thrissur	18,399	13,726	34
Kozhikode	16,205	13,191	23
Ernakulam	14,951	12,406	21
Palakkad	13,465	9,389	43
Kollam	9,230	8,876	4
Kannur	7,806	5,806	34
Alappuzha	7,555	6,038	25
Thiruvanathapuram	7,190	7,260	-1
Pune	7,059	7,263	-3

Table- 2 Highest number of cases by district wise in India

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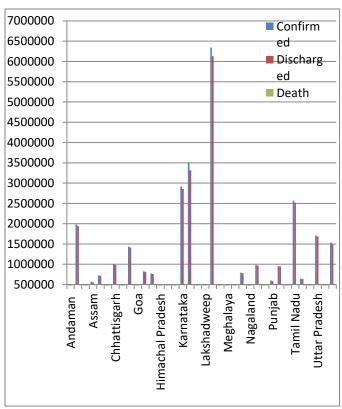


Fig- 4 State wise cases in India

Vaccination:

To end this covid 19 virus, our country people needs better immunity, the safest way to achieve this with vaccine. Vaccine is the production of antibodies and provides immunity among several diseases. In India 50.9 cr vaccine are given in this 11.3 Cr people get fully vaccinated, 8.3% of population fully vaccinated till August 4, 2021. The person who have the age above 18 years including pregnant women are now eligible for COVID-19 vaccination. The minor side effects of vaccination are like mild fever, body pain, pain at the injection site or feeling unwell for 1-3 days.

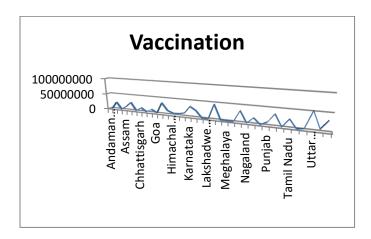


Fig-5 Vaccination chart

2. CONCLUSIONS

The COVID-19 started from SARS-CoV-2 virus in the Wuhan City of China and it spread across all over the countries. India Government making necessary actions and precaution for COVID-19. The COVID-19 vaccines have been an extraordinary success. So all the individuals whose age above 18 must take the vaccine dosage. Boosting the healthcare system by increasing the number of professionals, use technology to reduce the burden on hospitals and doctors. The right steps should be taken to control the situation more worst such as staying at homes, lockdown, social distancing, using sanitizers, face mask, Vaccination to improve immunity against COVID-19. It is hoped that INDIA will overtake the COVID-19.

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