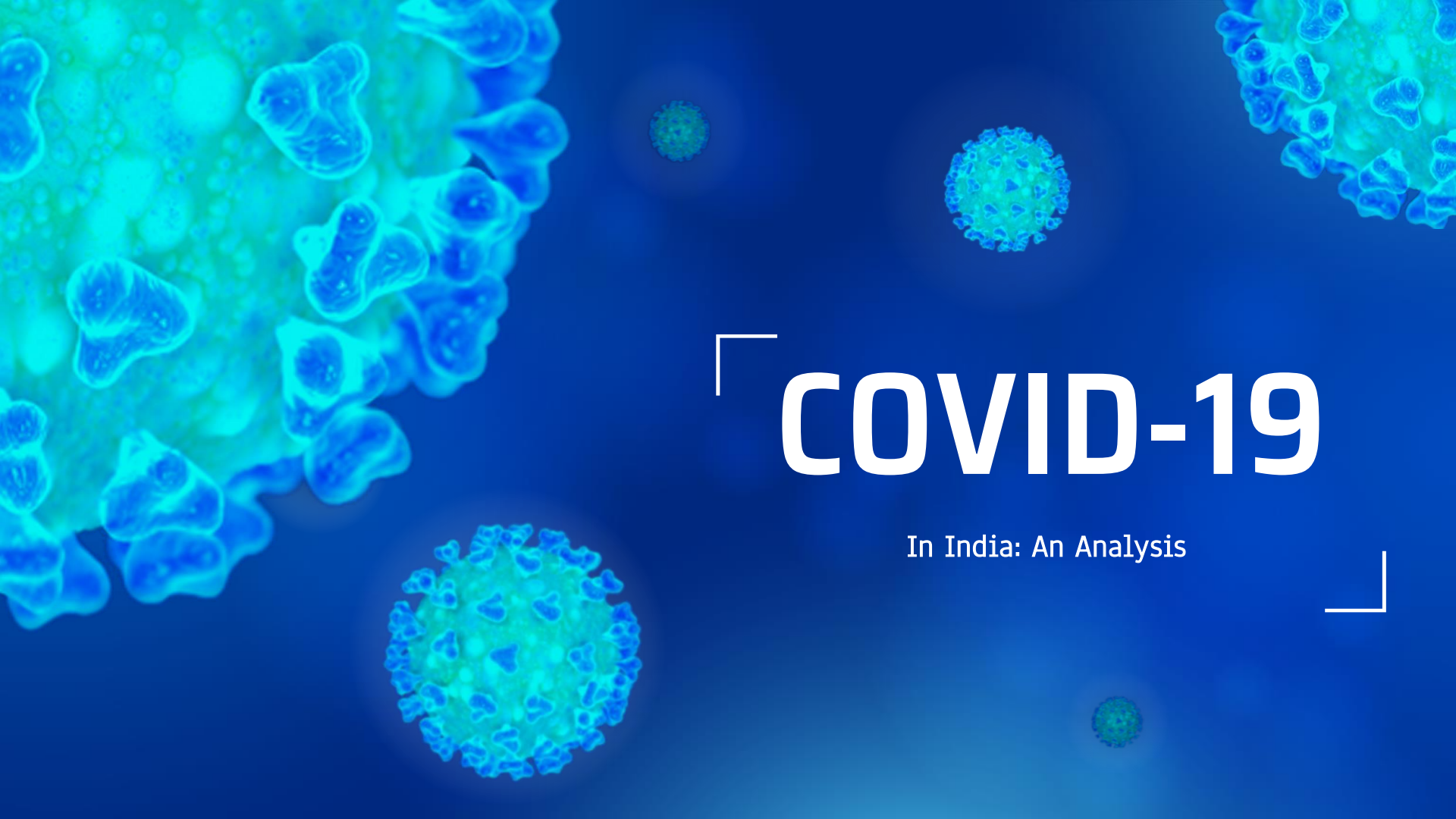


The background is a deep blue gradient. It features several stylized representations of COVID-19 virus particles, which are spherical with a textured, bumpy surface. There are also larger, more complex structures that resemble cells or larger viral aggregates with irregular, protruding edges. The overall aesthetic is scientific and digital.

COVID-19

In India: An Analysis

「01.

COVID-19 IN INDIA

Brief Introduction & Preface

「02.

SITUATION ANALYSIS IN STATES

Discussion on the situation of COVID-19 across various States of India

「03.

AGE-SEX & COMORBIDITY

Comorbidities, Age and Gender specific analysis of caseloads and fatality of COVID-19

「04.

HEALTH SYSTEMS & COVID-19

A State-wise Analysis of the Health System capacities in fighting COVID-19

┌
05.

RESPONSE OF THE GOVERNMENT TO COVID-19

Discussion on the key containment and mitigation policies of the Governments to tackle the effects of COVID-19

┌
07.

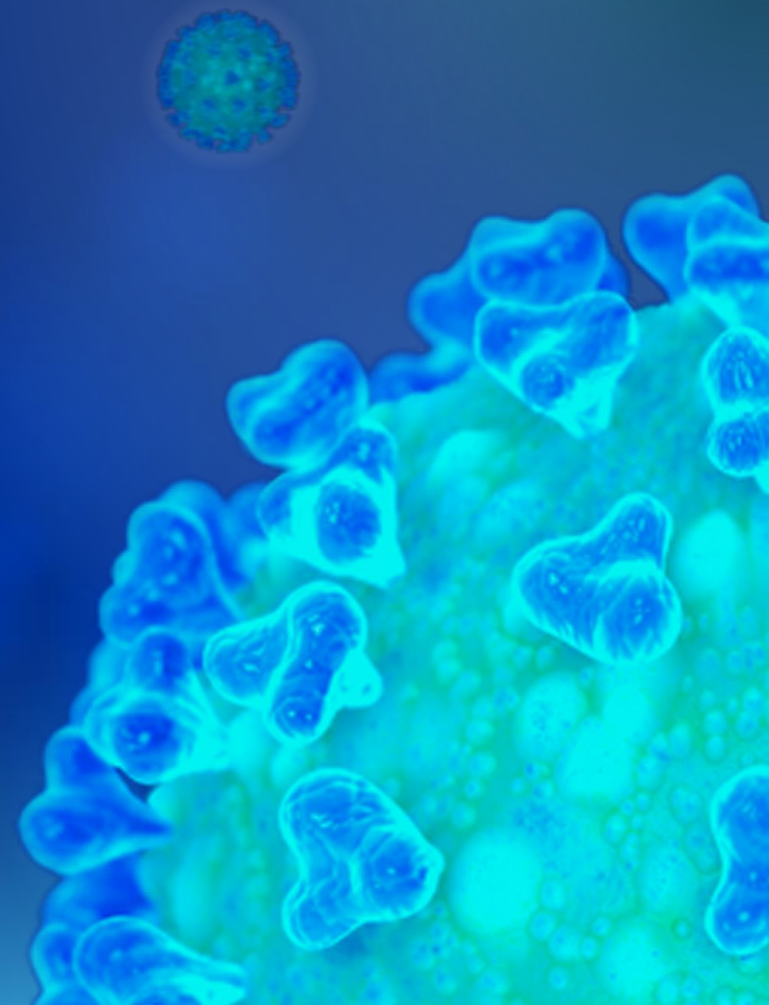
CONCLUSION

We end our discussion by summarizing the key messages of the Research

┌
06.

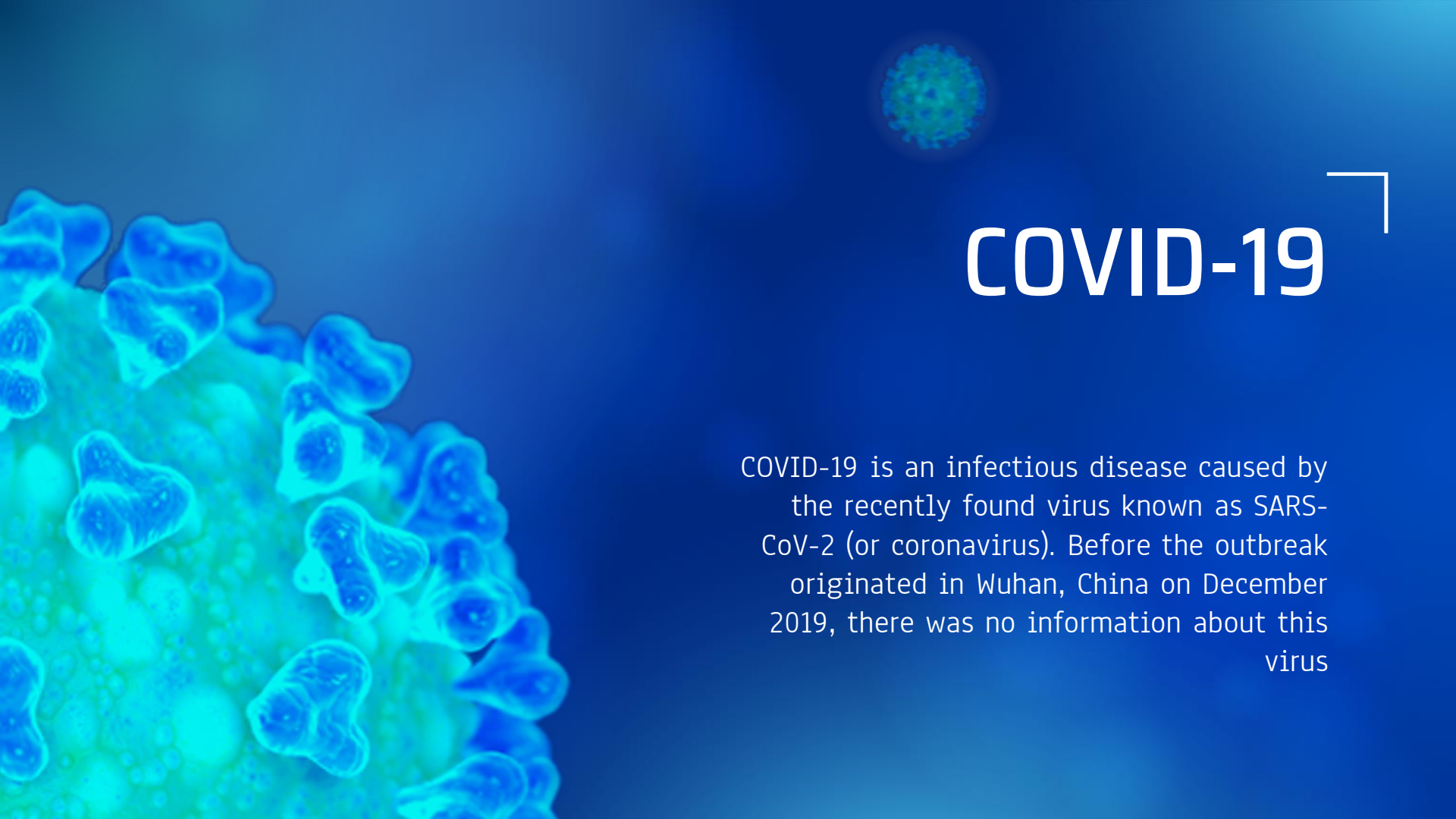
LEARNING FROM THE PANDEMIC

What could be the core areas of focus in Health sector in the post Covid-19 World?



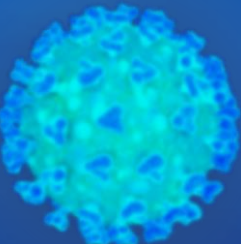
"The pandemic is far from over,I repaet
the pandemic is far from over,we continue
to urge all countries to find,isolate,test
and treat all cases and trace every
contact.....but the worst is yet to come"

—DR. TEDROS ADHANOM GHEBREYESUS, WORLD HEALTH
ORGANIZATION'S DIRECTOR GENERAL



COVID-19

COVID-19 is an infectious disease caused by the recently found virus known as SARS-CoV-2 (or coronavirus). Before the outbreak originated in Wuhan, China on December 2019, there was no information about this virus



4,11,133

Active cases of COVID-19 in India as of July 2020

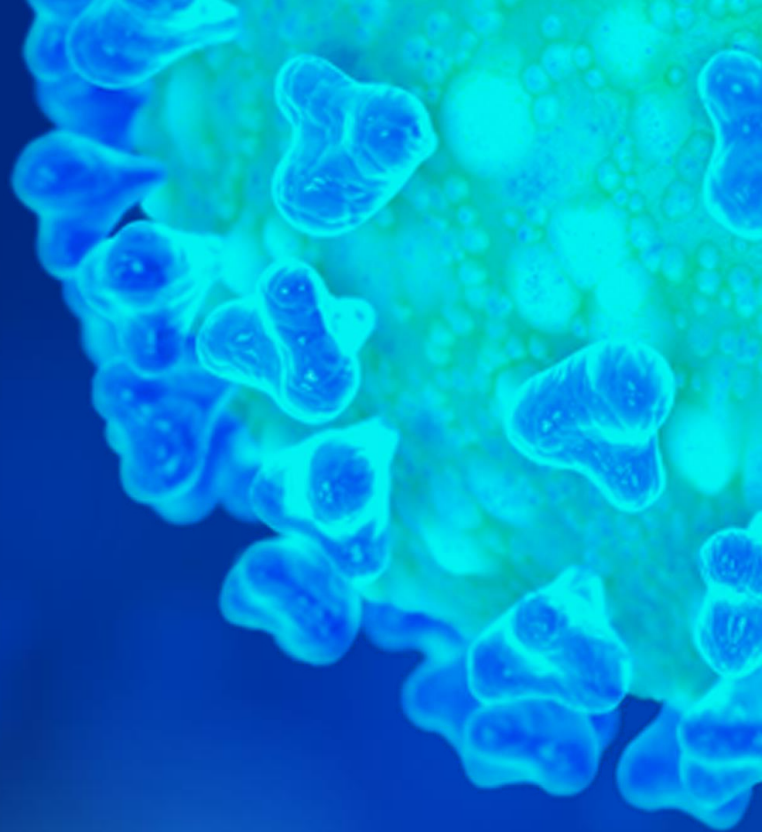
5,864,623

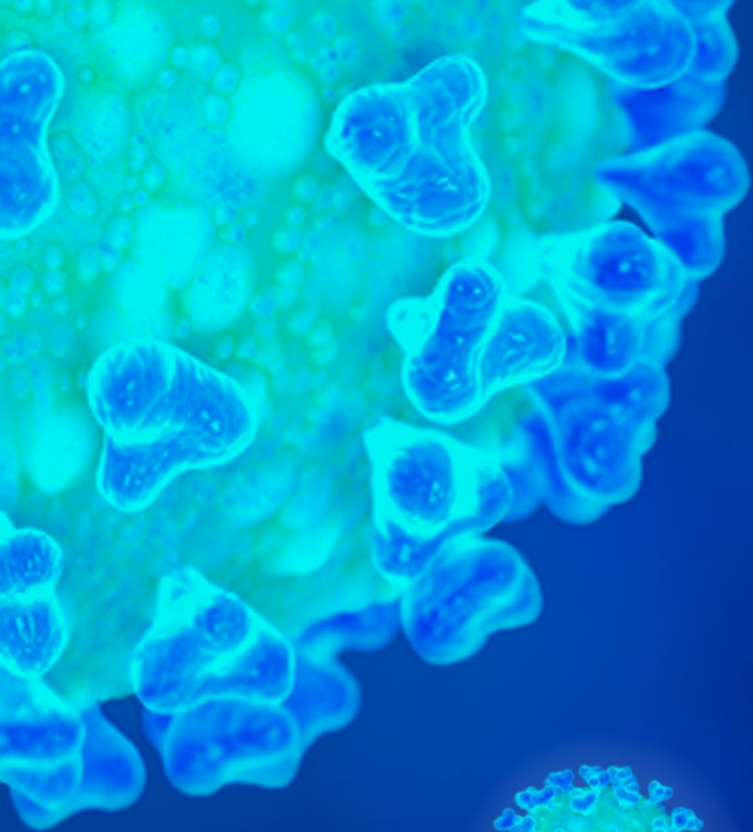
Active cases of COVID-19 globally as of July 2020



IMPACT

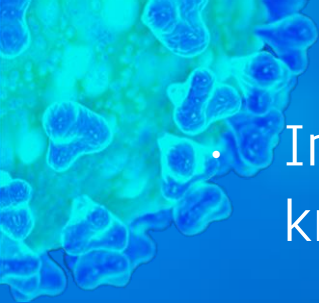
The virus's spread in the countries around the world is a grave concern to its **public health systems**. Apart from affecting the health systems across the world **stretching its resources**, with **cases soaring and deaths rising**, it is also having an impact on the **global economy**. There are perceptible disruptions to **supply chains, disruptions to daily business activity**, to **travel** and to many other aspects of an individual's life. 🌐



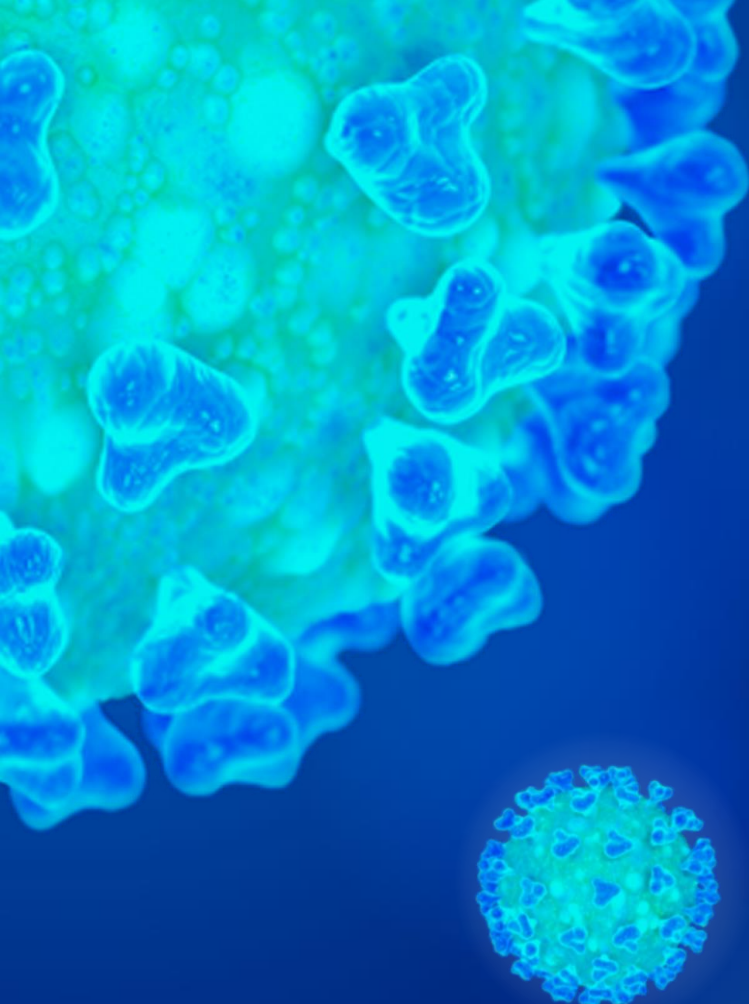


01. COVID-19 IN INDIA

Brief Introduction & Preface



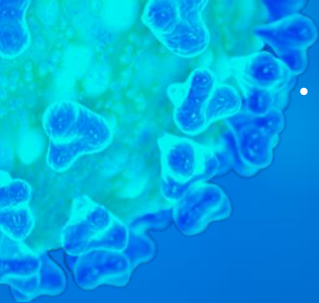
- India witnessed an outbreak of the corona virus, otherwise known as COVID-19, or SARS-CoV-2 in late January 2020.
- It was when three Indian students travelled to the state of Kerala from Wuhan in China - the epicentre of the outbreak, all three tested positive for COVID-19, confirming a local contagion.
- Simultaneously, several other cases were detected in other parts of the country, mostly linked to people with a travel history to affected countries rapidly increasing the infections in almost all parts of the country

A large, detailed illustration of a cell cluster is on the left side of the slide. It features various cell shapes with visible nuclei. Three smaller, spherical virus-like particles with surface spikes are scattered in the background: one in the upper right, one in the lower left, and one in the center.

02.

SITUATION ANALYSIS IN STATES

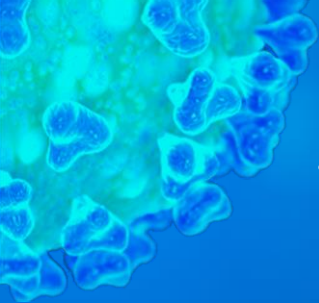
Assessing the Situation of COVID-19 in India



- After the first confirmed COVID-19 case was detected in the State of Kerala, India today has more than 10 lakhs Corona Virus Cases and now the world's 3rd most affected nation.
- Maharashtra and Tamil Nadu remain the two worst-affected states in the country, accounting for 50% of the total active cases
- Karnataka, Andhra Pradesh, Uttar Pradesh, West Bengal, Delhi, Telangana, Gujarat and Assam are the other affected states that contribute to 36 % of the total active cases

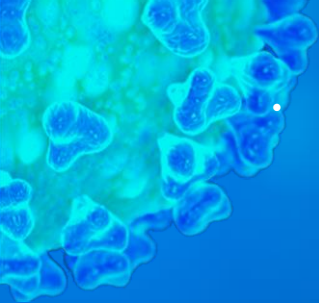
8 STATES WITH THE HIGHEST NUMBER OF ACTIVE CASES-DEATHS

	ACTIVE CASES	DEATHS
MAHARASHTRA	1.00,000+	12,276
TAMIL NADU	51,347	2,626
KARNATAKA	44,146	1,464
ANDHRA PRADESH	32,226	758
UTTAR PRADESH	20,204	1,229
WEST-BENGAL	17,813	1182
DELHI	15,288	3690
GUJARAT	11,760	2196

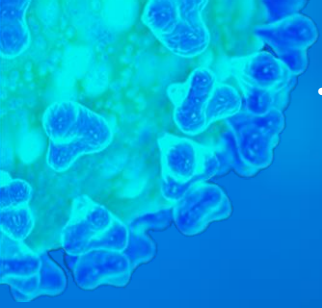


- From its first reported case, India took 58 days to record 1,000 cases. It crossed 10,000 in another 16 days.
- From there to 1,00,000 was breached in 35 days.
- Since then the number of days to add an additional lakh cases has gone down.

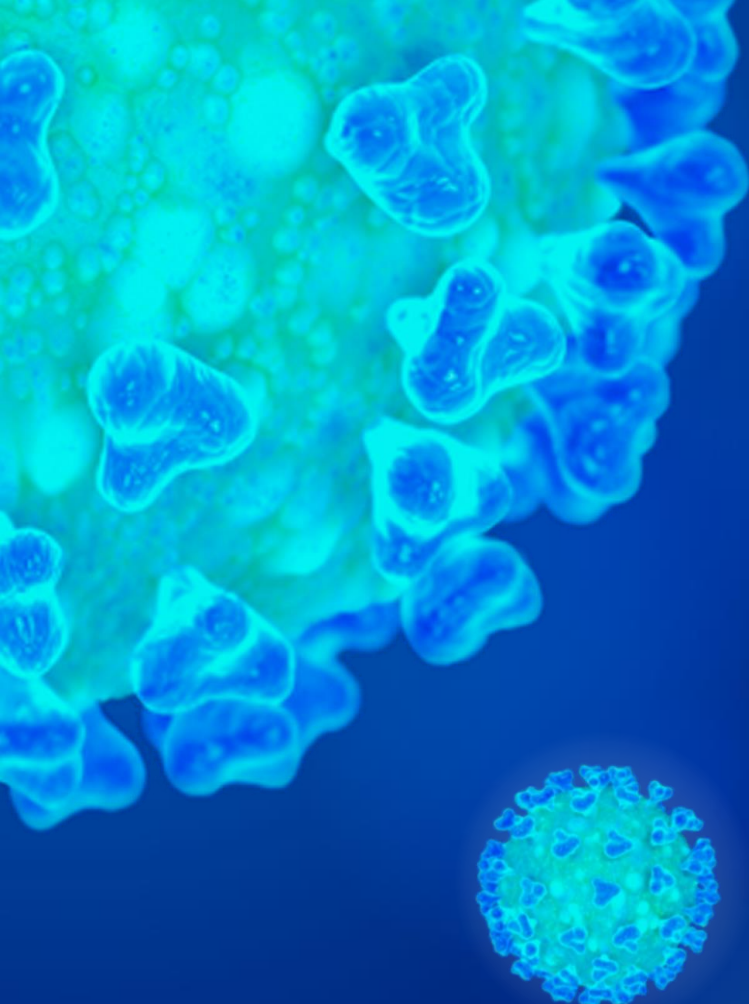




- The Government imposed a 10 week long nation wise lockdown from the 25th March,2020-31st May,2020
- It has slowed the growth rate of the pandemic from the initial doubling rate (pre-lockdown) of 3.4 days to almost 14 days at the end of the lockdown.
- The most significant impact of the lockdown was that it helped keep the mortality numbers low.
- It also gave the authorities time to ramp up health infrastructure and medical facilities to prepare for the future.



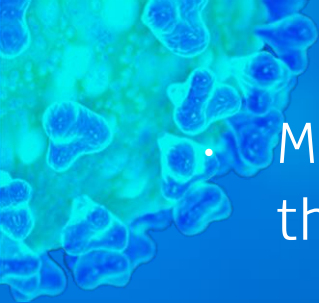
- Despite its size and population, economic constraints and other challenges, India's Case Fertility Rate(2.55 %) is less than half of China's and significantly and several times better than most developed Western European nations
- It is mainly due to reporting of cases to the hospital within 24-72 hours of the patient showing symptoms
- Recoveries has exceeded the Active Cases by almost 3 Lakhs in India while more than seven lakh have been cured of the viral disease so far (Recovery Rate=63%)

A large, detailed microscopic image of cells and viruses is positioned on the left side of the slide. The cells are shown in various stages of division and are colored in shades of blue and green. Several spherical viruses, resembling coronaviruses, are also visible, some with prominent surface proteins. The background is a solid dark blue.

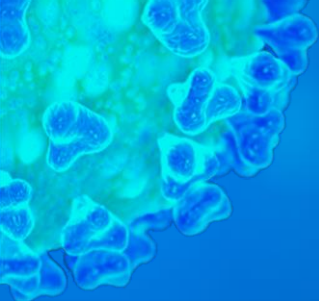
03.

AGE-GENDER & COMORBIDITY

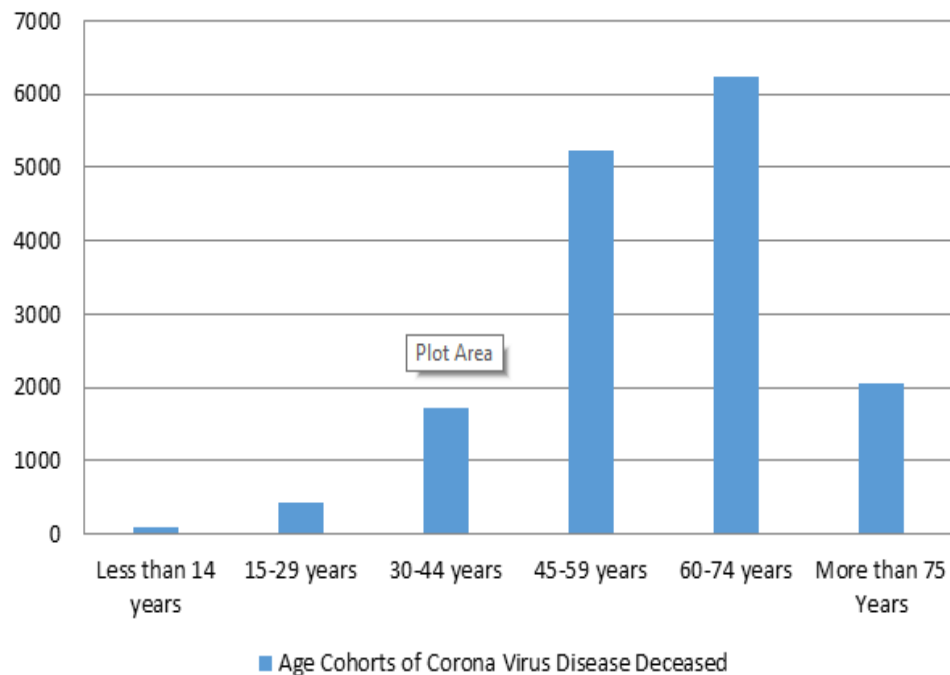
Analysis of the COVID-19 Case fatalities due to factors
of age,gender and comorbidities



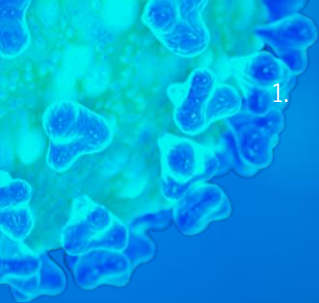
- More than 50% of the total deaths are happening among the elderly persons above the age of 60
- There is a remarkable share of deaths in the age category of 45-59 years-almost one in three Corona Virus deaths are occurring in this age bracket-which is often assumed to be the most productive years on a person's lifetime.
- Almost half of the reported deaths due to the corona virus were of individuals below the age of 60 years hence younger and healthier population are also not averse to risk from the virus.



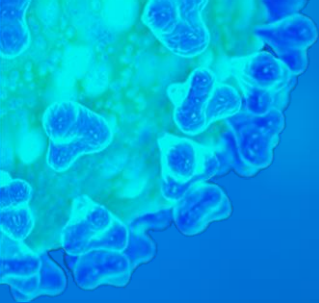
Age Cohorts of Corona Virus Disease Deceased



Source: Integrated Disease Surveillance Program Analysis



1. According to a study done recently by the Integrated Disease Surveillance Programme, a body which is involved in the tracking and analysis of all infectious diseases in India and works under the overall aegis of the Ministry of Health and Family Welfare(MoHFW) has reported
 - 57% of the patients in our country who had succumbed to COVID-19 had comorbidities
 - However, 43% of them had no pre-existing health conditions co-occurring with Corona Virus disease and yet resulted in deaths.



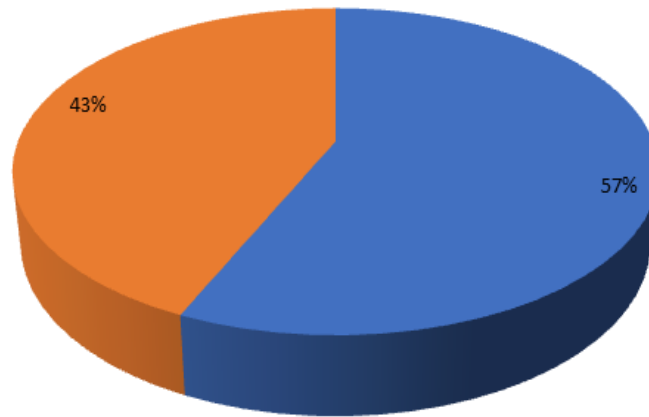
UNDERLYING CO-MORBIDITY IN COVID-19 DEATHS

Total Deaths: 15,962

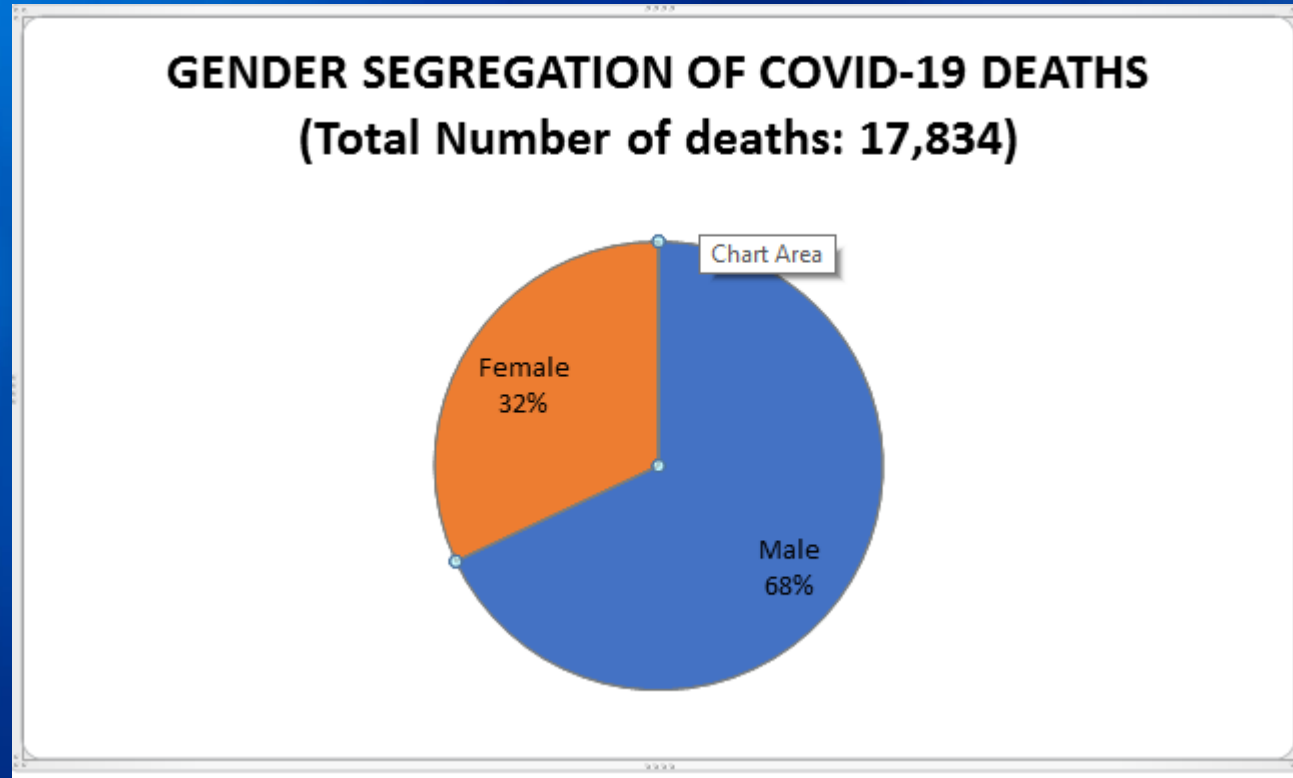
Yes: 9,043

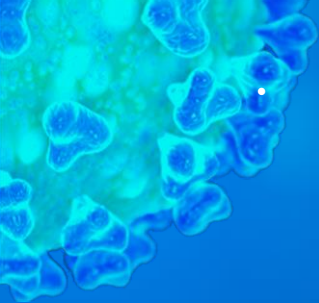
No: 6,919

■ Yes ■ No

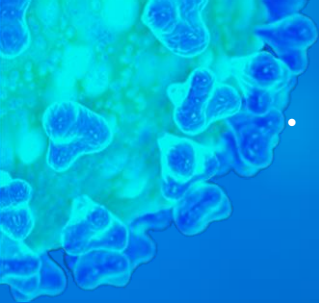


- The IDSP analysis reveals that 68% of all deaths related to Corona in India were among Males.

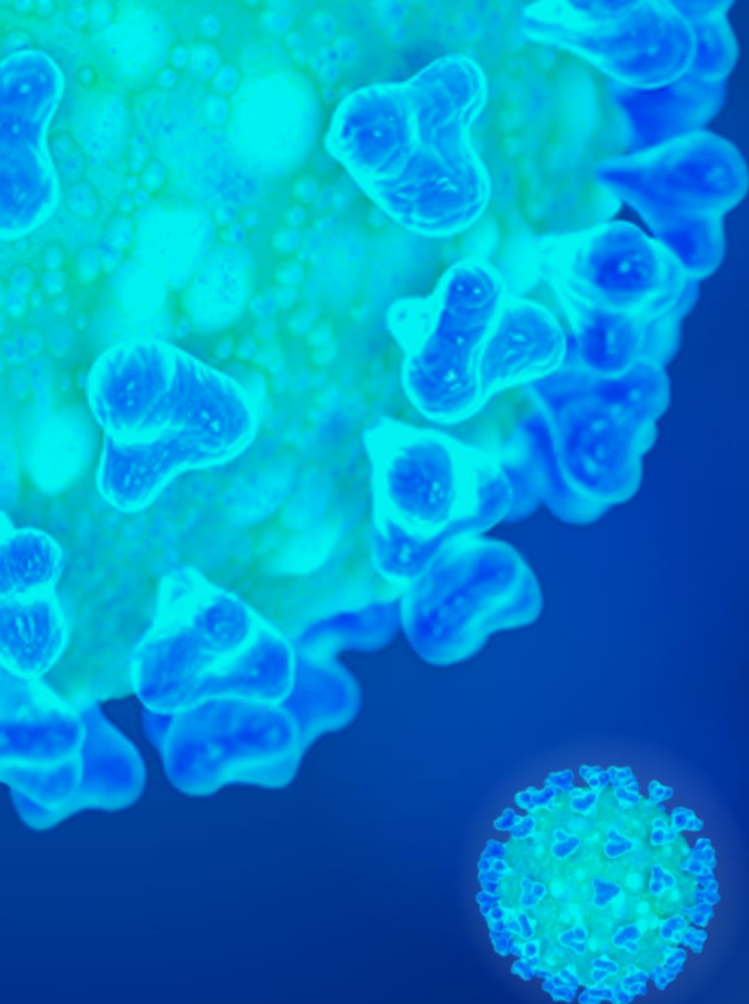




- The reasons for a higher caseload and subsequent fatalities in men than women are attributed to a large number of personal, biological and social factors leading to higher chances of comorbidities.
- But a study done by a group of scientists on India's COVID patterns shows a different picture.
- While it may appear that more men are succumbing to Corona Virus, these findings have pointed out that the Case Fatality of Women is higher than men which is surprisingly uncommon across the world.



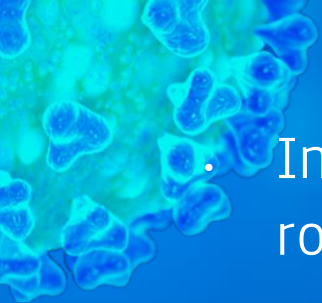
- In other words, this research points out that women are up against a higher chance to die from corona virus than men.
- Particularly, it pointed out that in the age group of 40-49 years more women succumbed to COVID than men in the same age cohort
- It also revealed shockingly that in the age bracket of 5-19 years only females have had the fatalities due to Corona Virus..

A large, detailed microscopic image of cells, possibly epithelial cells, is visible on the left side of the slide. The cells are stained in shades of blue and green, showing their internal structures and nuclei. In the upper right and lower center, there are smaller, spherical virus-like particles with a textured surface, also in blue and green tones.

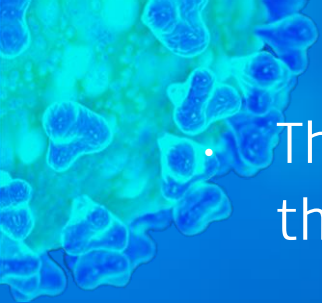
04.

HEALTH SYSTEMS & COVID-19

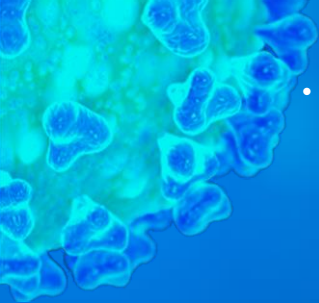
ANALYSIS OF THE HEALTH SYSTEMS VIS.A.VIS COVID-19



- Inadequate public health spending recognised as the root cause of the poor health indicators
- The largely unplanned urbanisation not only degrades the environment but also creates inequity among the different socio-economic groups
- Disease profile of urban setting undergoing a change: rise of NCDs even in the urban poor



- Thrust for urban health much needed with strengthening the NUHM
- Gujarat has 50% shortfall of PHCs, while it is 54% for Maharashtra and 41% for Tamil Nadu
- Shortage in manpower also: ANMs and female health workers
- Lessons to be learnt from the decentralised approach adopted in Kerala as early as 1996



- Shortage in manpower also: PHCs, CHCs, ANMs and female health workers
- States like Bihar, Manipur, Meghalaya and Nagaland have zero urban CHCs

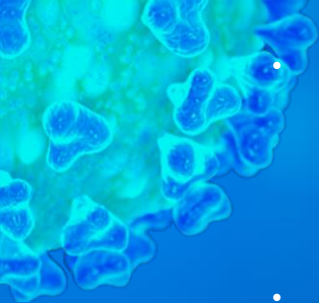
STATE	% SHORTFALL IN HEALTHCARE WORKERS IN PHCs
UTTRAKHAND	100
TRIPURA	82
CHATTISGARH	70
BIHAR	67
KERELA	82
PUNJAB	93
KARNATAKA	23
TELANGANA	26

The background of the slide features a microscopic view of cells and viruses. On the left, a large cluster of cells is visible, with some cells showing internal structures like nuclei. In the upper right, there is a small, spherical virus particle with a textured surface. In the lower left, there is a larger, more complex virus particle with a distinct outer shell and internal structure. The overall color scheme is blue and green, with a gradient background.

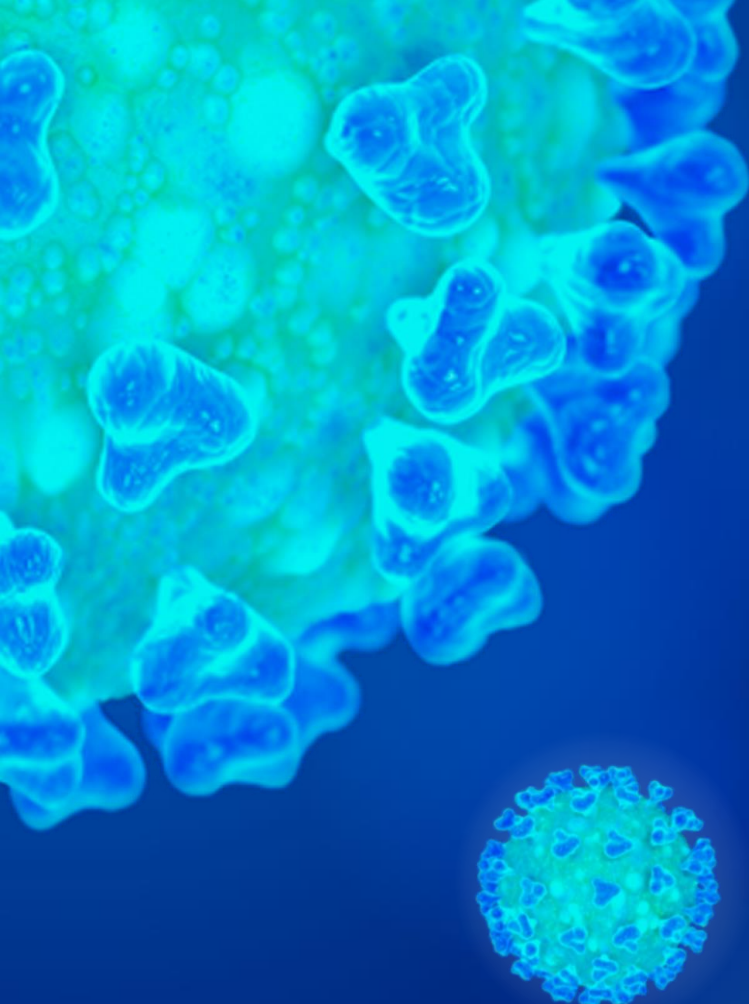
05.

RESPONSE OF THE GOVERNMENT

Steps taken by the Government to tackle COVID-19



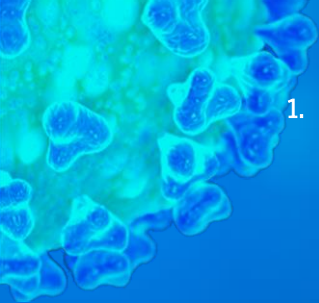
- Ministry of Health and Family Welfare Toll-Free number for prompt guidance
- Pradhan Mantri Garib Kalyan Anna Yojana, 'Prime Minister's Citizen Assistance and Relief in Emergency Situations Fund (PM CARES Fund)
- Insurance cover of Rs.50 Lakhs each to health workers
- Inclusion of private sector in testing and treatment
- Bharat Biotech is in the process of developing its first indigenous corona virus vaccine COVAXIN – human trials phase I launched

A large, detailed illustration of a cell cluster is on the left side of the slide. It shows various cells with nuclei and cytoplasm. In the upper right, there is a small, spherical virus particle with a textured surface. In the lower left, there is another spherical virus particle, similar in appearance to the one in the upper right, but with a slightly different texture.

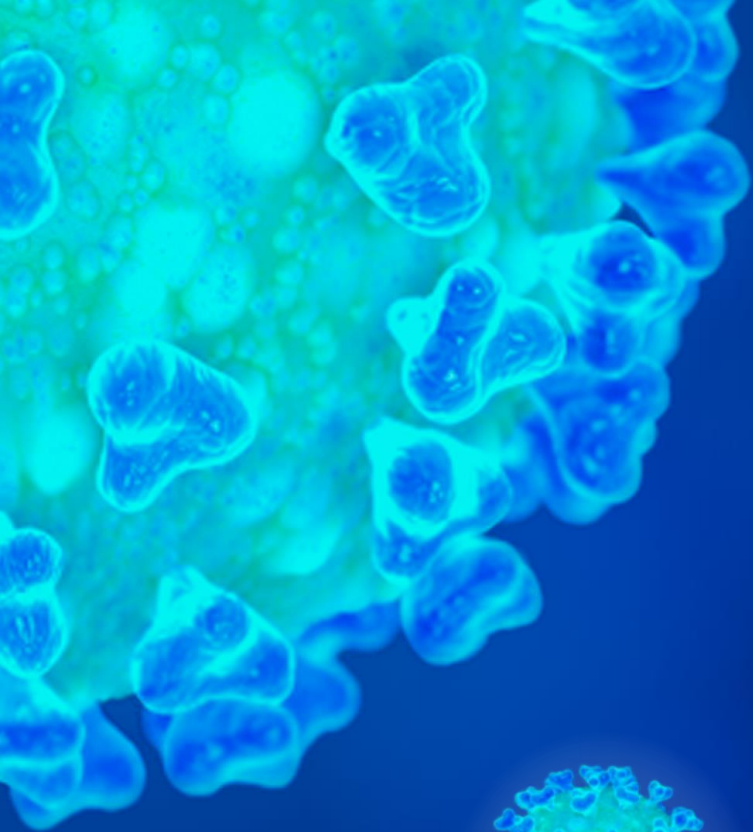
06.

PRIORITY AREAS

Based on the current status of COVID-19 and the lessons from its early response, what should be India's priorities?



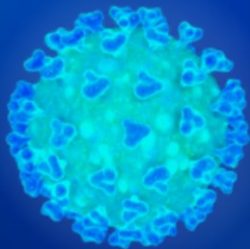
1. Further Expand Testing Capacity
2. Welfare of the Economically Weaker Section
3. Importance of Essential Health Care Services
4. Mitigation/Prevention Measures Strictly



07.

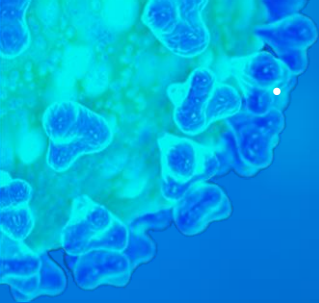
CONCLUSIONS

Summarizing our learning so far!

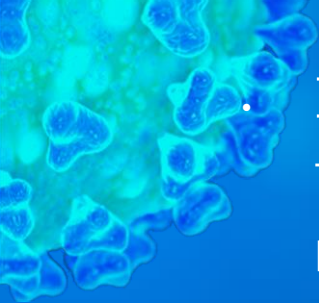


ABOUT 80% OF PEOPLE
RECOVER FROM THIS
DISEASE WITHOUT
NEEDING SPECIAL
TREATMENT



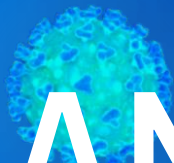


- India with around 11 Lakh cases as on the 21th July, 2020 has overtaken Russia and is now at the 3rd worst hit country across the world just after the United States and Brazil.
- **10 CITIES CONTRIBUTE TO 52% CASES AND 65% DEATHS**
- Covid-19 in India has essentially been an urban big-city pandemic it does not come as a surprise that the nine of the 10 worst affected cities (in terms of case-load) — are either state capitals or big urban metropolitan centres.
- On a positive note, India has ramped up its testing infrastructure substantially and also is self-sufficient in the production of protective kits and tools for COVID-19



- India's Mortality Rate of 2.55 per cent places it favourably when compared with most of the other major nations of the world.
- The number of recovered people exceeds India's active Covid-19 patients by 309,627 as more than seven lakh have been cured of the viral disease so far.
- The Case fatality rate of 2.5% is however the silver lining where we are much lower than the global rate of 4.7%.
- Also on the bright side our recovery rate is much better than the global rate. We are at 63.25% whereas the global recovery rate is around 56.6%.

THANKS!



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