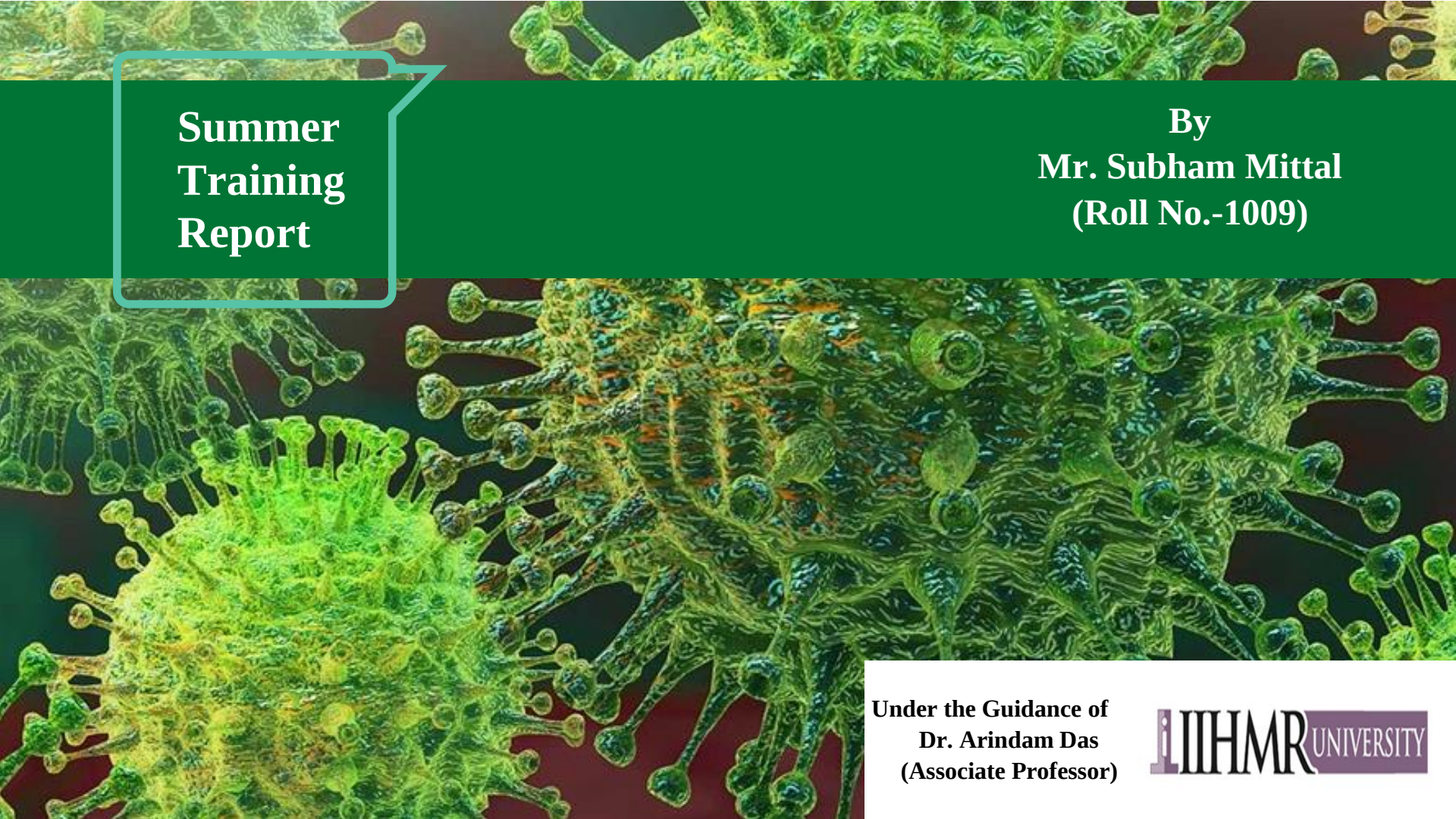




Summer Training Report

By
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Under the Guidance of
Dr. Arindam Das
(Associate Professor)



PART-I

MAGNITUDE OF COVID-19 IN INDIA

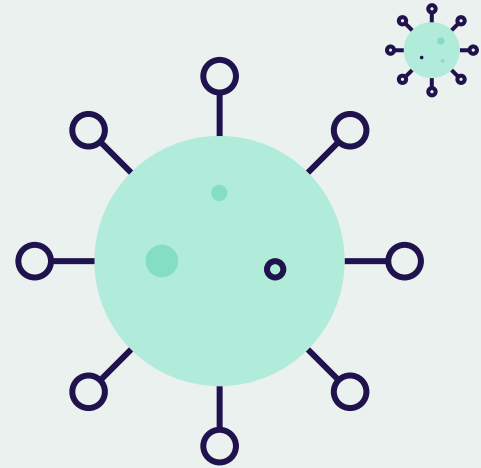
Research Project



INTRODUCTION

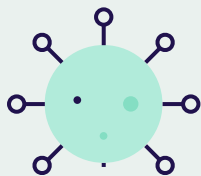
Coronavirus is a family of viruses that can cause illness ranging from the common cold to Severe Respiratory syndrome. 2019-nCov is the new strain that was not identified in humans earlier.

It is a positive single-strand enveloped RNA virus belonging to the family of coronaviridae, the name is derived from the Latin word corona, meaning crown as the virus look under the microscope some of them four or five cause diseases in humans other types of corona effect to animals and sometimes in rare cases the virus jumps from animals to humans.



MAGNITUDE OF COVID-19 IN INDIA

- ❑ Seeing the hazardous face of COVID-19, its levels of spreading and severity, the World Health Organization (WHO) characterized it as a pandemic on 11 March 2020.
- ❑ India, the second-largest populous nation has initially seen a low infection has taken a jump of doubling its cases in a few days.
- ❑ Prime Minister Modi, in exercise to the powers under the Disaster Management Act, 2005, issued the order for States/UT prescribing lockdown for the containment of the Coronavirus epidemic in the country.
- ❑ World Health organization working with the Ministry of Health and Family Welfare to strengthen the surveillance, build the capacity of the health system and optimize 'window of opportunity' created by mandatory physical distancing in India.
- ❑ India's pre-active, proactive response is graded with high-level political commitment.



HOW DO YOU GET COVID-19?

A person can contract COVID-19 if:

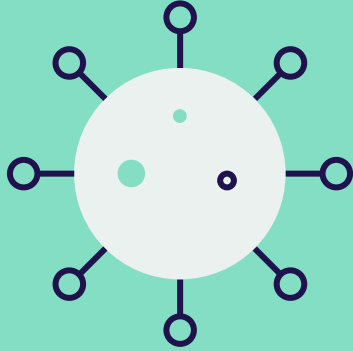
- They come in contact with another person infected with the virus
- Someone infected coughs or sneezes directly to them
- They touch any surface with little droplets from infected people's cough or sneezes and then touch their eyes, nose or mouth

Objectives

- To know the total number of tests done per million in India.
- To figure out the total number of confirmed active, recovered, and deceased cases.
- To find out important indicators like recovery rate, deceased rate and case rate of COVID-19 in India.
- To analyse the COVID-19 cases according to age-sex composition.

**“TIMELY, EVIDENCE-BASED INFORMATION IS THE BEST VACCINE
AGAINST RUMOURS AND MISINFORMATION”**

METHODOLOGY

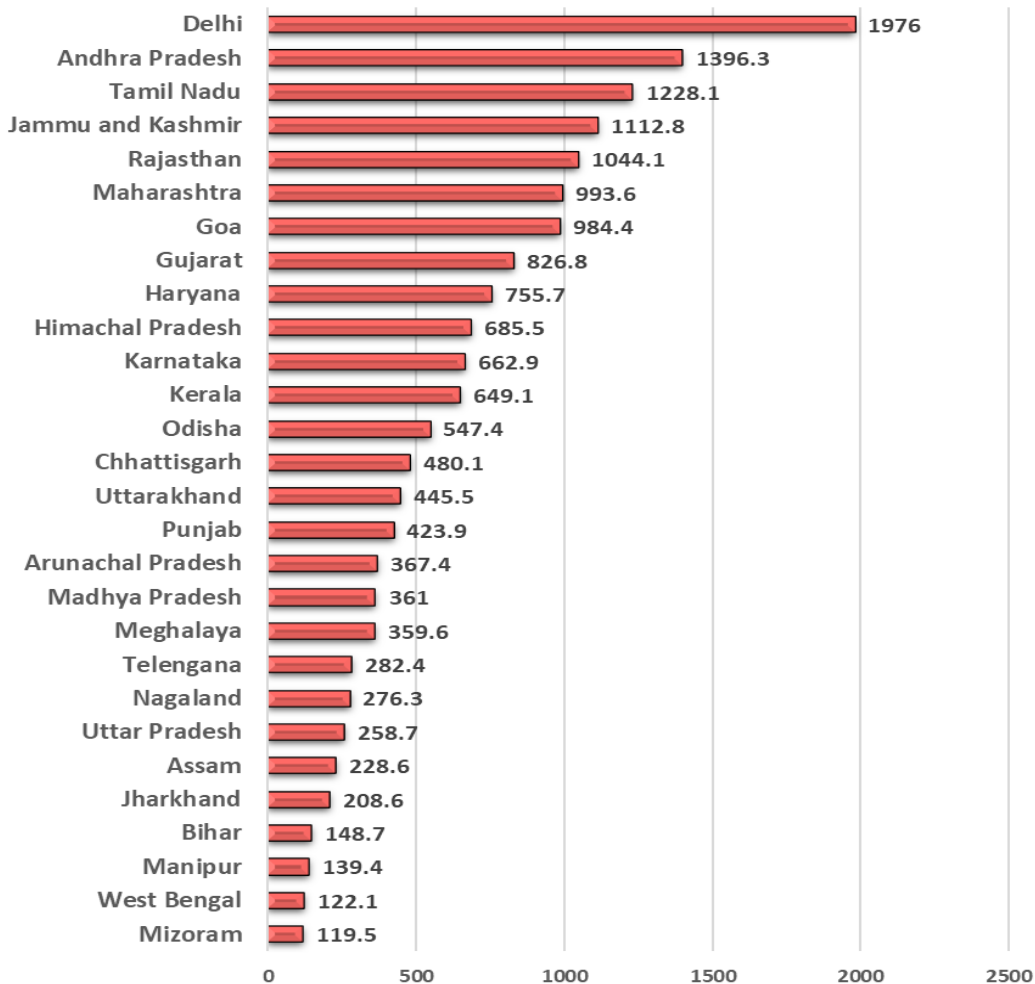


In this study, we are using an observational study design. The data is collected from different sources like articles, journals, websites, and newspapers and the detailed analysis is done of the states of India. The state-wise analysis is done to figure out the number of tests done, to achieve the above-mentioned objectives.



Magnitude of COVID-19 in INDIA

State-wise COVID-19 samples tested per million



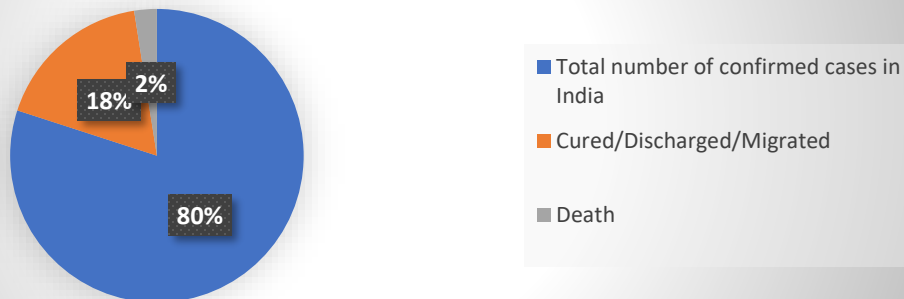
COVID-19 Tests conducted by States

Delhi the national capital has emerged to do the maximum number of tests 1976 per million, followed by Andhra Pradesh with 1396 per million. Maharashtra has the highest number of active cases-9318 and accounts for about 30% of the total cases, Mumbai has the highest number of cases among the districts. Gujarat is the second state to have the highest number of cases followed by Delhi. Six states naming Arunachal Pradesh, Goa, Manipur, Tripura, Sikkim, and Nagaland with no new COVID-19 cases.

COVID-19 CASES IN INDIA

as on 26th April, 2020

Covid-19 cases distribution



~26496

Total number of confirmed cases in India

~5804

Cured/Discharged/Migrated

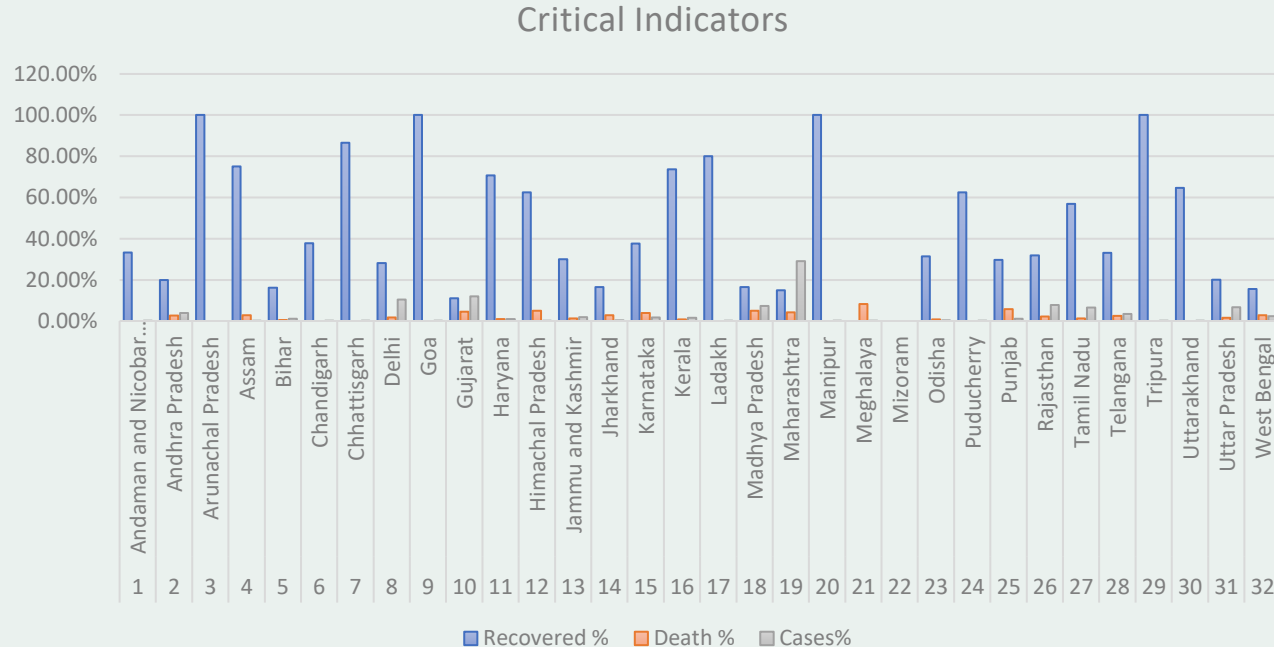
~824

Death

CRITICAL INDICATORS

Equations Used

- Recovery Rate% = $\left(\frac{\text{Total recovered}}{\text{Total cases}} \right) * 100$
- Death Rate% = $\left(\frac{\text{Total Deaths}}{\text{Total Cases}} \right) * 100$
- Cases% = $\left(\frac{\text{Total confirmed cases of a state share}}{\text{Total Cases}} \right) * 100$



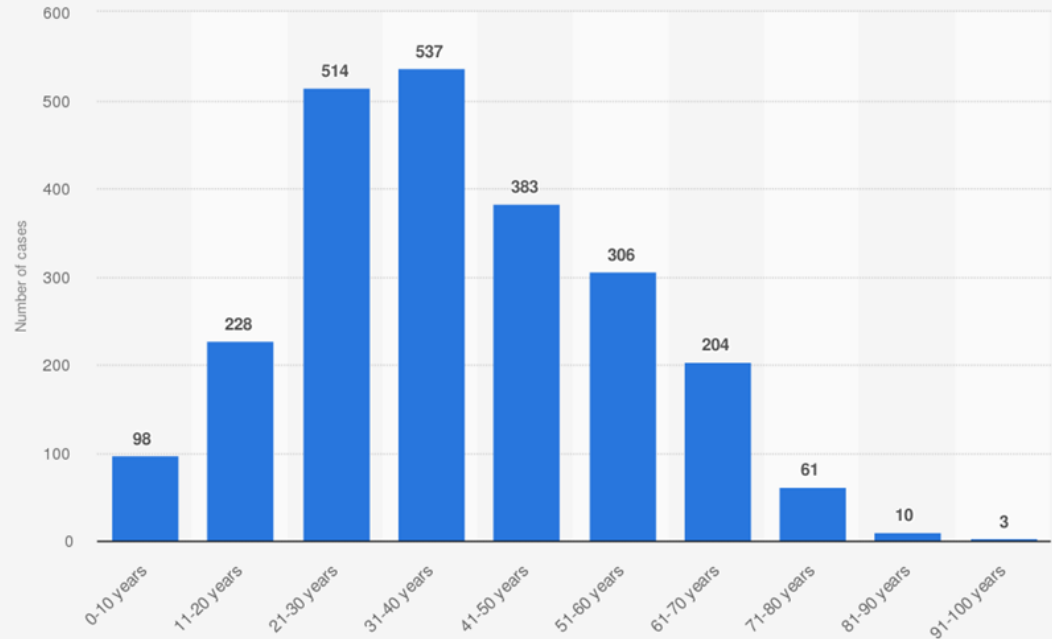
Age distribution among COVID-19 cases in INDIA

Coronavirus positive cases risen to 28,380 in India (April 27, 2020). A majority of the coronavirus (COVID-19) cases in India affected people between ages 21 and 40 as of April 27, 2020.

Of these, the age group between 31 and 40 years old were most affected with approximately 537 cases.

This trend was significantly lower when compared to findings from other countries. However, compared to many western countries, India also had a younger population directly affecting the proportion of COVID-19 cases.

Number of the coronavirus (COVID-19) cases in India 2020, by age group*



Sources

COVID-19 Tracker India; Various sources (crowdsourced patient database, government reports)
© Statista 2020

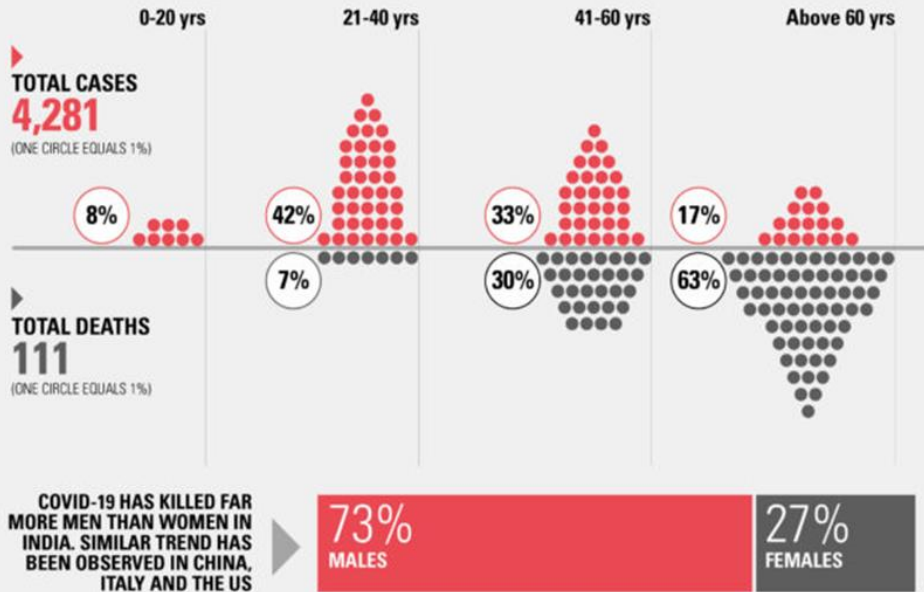
Additional Information:

India; COVID-19 Tracker India; Various sources (crowdsourced patient database, government reports); as of April 26, 2020; *2,344 patients

COVID-19 INFECTIONS- AGE/GENDER WISE

COVID-19 FATALITIES IN INDIA

While COVID-19 has killed more elderly people in India, it has infected far more people below the age of 60.



- As per the press briefing by the Joint Secretary of Health Ministry the people whose age is more than 60 years account for about 63% of COVID-19 deaths.
- In detail, he told that the trend of COVID-19 is different in as about 42 % cases are of 21-40 years, 33% cases of 41-60 years, and 8% of 0-20 years age group. It also revealed that the most hit age was found of age 41-60 years having about 30% of reported deaths.

Source: “#IndiaFightsCorona COVID-19.” MyGov.in, 3 Apr. 2020, www.mygov.in/covid-19.

#INDIAFIGHTSCORONA

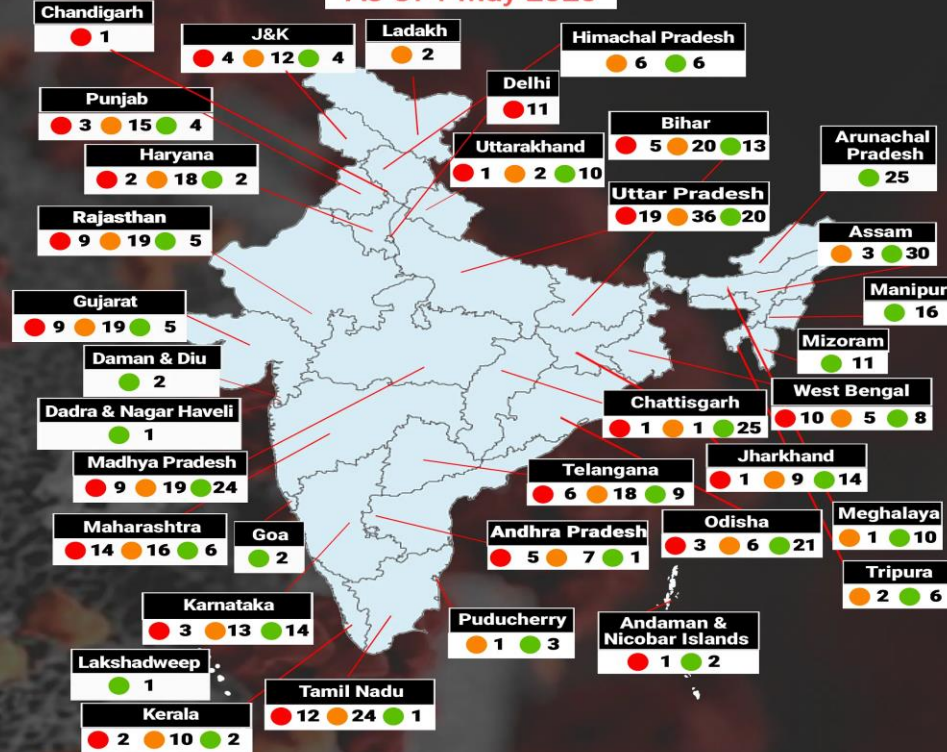
The government is using the colour codes to mark the district with COVID-19 and virus-free zones.

- The red zone, the districts where the number of COVID-19 patients is more than 15, strict restrictions are imposed in the area or the area declared are hotspots.
- The orange zone where there are minimum activities are allowed as there is no case of COVID-19 from last 14 days.
- The green zone, have relaxations small MSME industries will be allowed to function with the guidelines to wear mask, follow hand hygiene and social distancing at workplace, the area where there is no case from last 28 days will also be declared as green zone.

CORONAVIRUS IN INDIA

Zonal Classification Of Districts

As Of 1 May 2020



● Total Red Zones : 130
● Total Orange Zones: 284
● Total Green Zones: 319

INTERVENTIONS

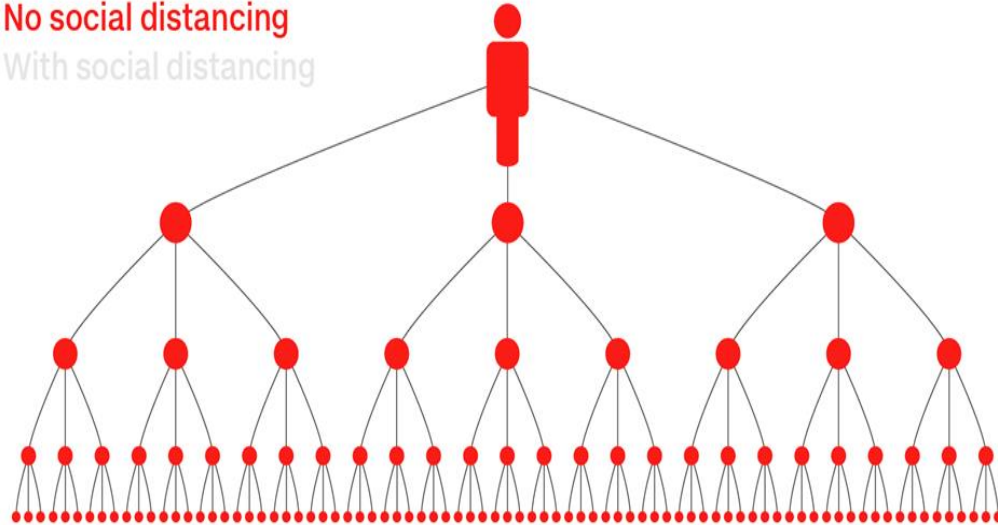
- In the view of the spread of COVID-19, the Ministry of Health and Family Welfare issued an advisory on Social distancing measures as without it the cases double every 4 days and with it take 8 days.
- The median incubation period of COVID-19 is 5 days- after this period person starts experiencing symptoms.

Why staying home matters

Social distancing lowers the number of people that can get infected. This diagram shows the wider impact in cutting infections by reducing contact.

No social distancing

With social distancing





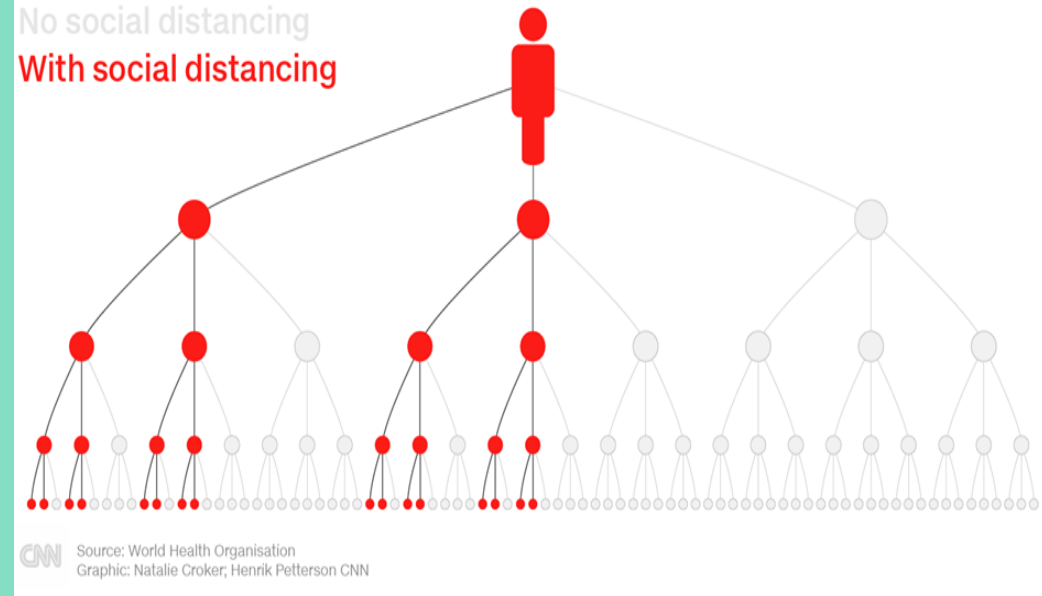
If social exposure is reduced to 75% then one person will infect 0.625 people in 5 days, and they will infect 2.5 people in 30 days.

If social exposure is reduced to 50% then one person will infect 1.25 people in 5 days, and they will infect 15 people in 30 days.

If there is no social distancing in place, then one person will infect 2.5 people in 5 days, and they will infect 406 people in 30 days.

Why staying home matters

Social distancing lowers the number of people that can get infected. This diagram shows the wider impact in cutting infections by reducing contact.



Source: <https://www.mohfw.gov.in/pdf/SocialDistancingAdvisorybyMOHFW.pdf>

SOCIAL DISTANCING



ONE METER



SAFE DISTANCE

Keep at least a distance of 1 meter (3 feet) between yourself and other people

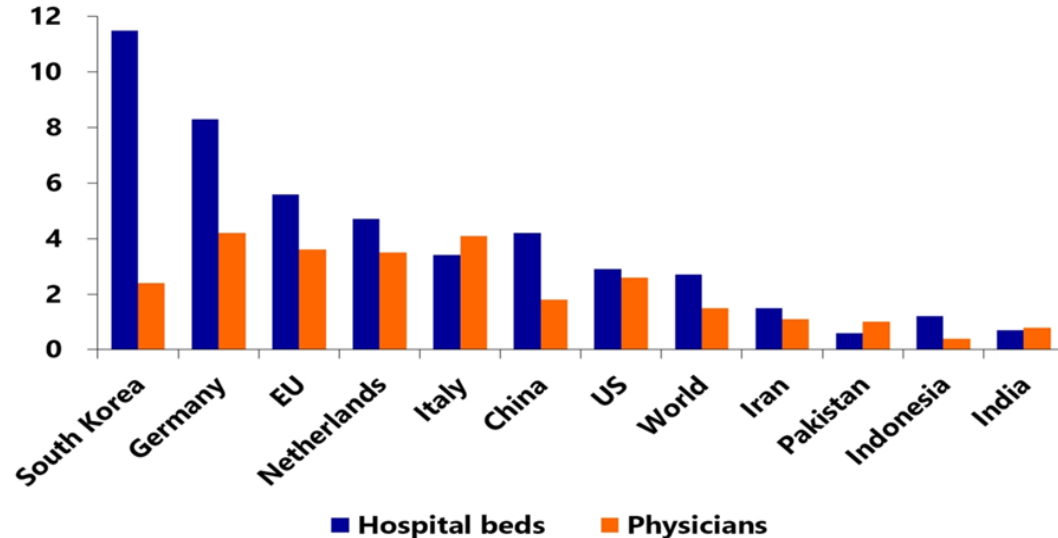
OLDER ADULTS

Try not to come in contact with the elderly, as they are the most vulnerable to the virus

THE SITUATION OF INDIA IN ACCORDANCE WITH HEALTHCARE

Healthcare Is Less Abundant In India Compared To Global Average

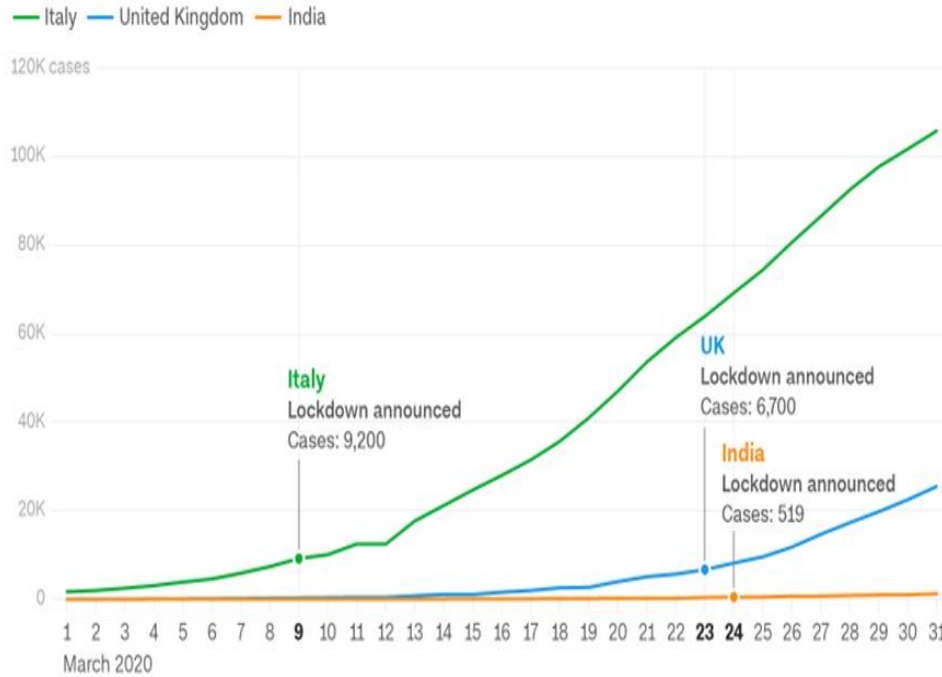
Per 1000 persons



Source: World Bank

Bloomberg | Quint

- India spends about 3% of its GDP on healthcare which is the lowest among emerging economies and the suggested rate is around 6%.
- India does not meet the WHO standard of 1 doctor per 1,000 people.
- The global median of hospital beds is around 27 per 10,000 people and India has 7 beds per 10,000 people. About 70 % of healthcare infrastructure in India is in Urban areas and the situation in rural areas is worse as the rural areas account for only 5 beds per 10,000 population.
- India imposed lockdown even when its total cases are less than new cases in other countries is a great move towards this pandemic.



Sources: Johns Hopkins University
Graphic: Natalie Leung, CNN



Italy waited till it had 9,200 coronavirus cases before it imposes nationwide lockdown, while the United states had 6,700, and India have moved into lockdown quickly as it was announced when the country had only 519 cases.

According to the Health Ministry, the country has conducted around 625,000 tests as on 26-04-2020.

Around 4% of India's test is positive as compared to US has 17%.

Countries announced lockdown

CONCLUSION

COVID-19 pandemic is affecting communities all over the world. Countries are working hard to contain the virus and stop it from community transmission as it has taken the life of 2,17,000 people.

- ❖ Swift and early response of India in imposing lockdown to stop the transmission of the virus thereby reducing morbidity and mortality.
- ❖ Experts predicted that India would have millions of coronavirus cases but so far, the world's second highest populous country appears to have avoided the worst.
- ❖ Lockdown is effective measure for curbing the spread in the countries that implemented it than those countries that do not.
- ❖ The study also finds that social distancing or staying at home matters as it lowers the rate of infection.
- ❖ Coronavirus has started its impact in India with 26496 cases. India is lacking in the testing rates as compared to other countries.
- ❖ The recovery rate of the country is improving as the hotspot districts are turning into non-hotspot districts.

RECOMMENDATIONS

01

Lockdown should have been imposed in more effective manner with stringent measures

02

Testing rates should be increased in the states most affected

03

High compliance to public health measures

04

Zero tolerance to any form of violence against health services and clinical establishments

05

Healthcare Infrastructure should be improved

06

Social distancing should have law enforcement as it is the best tool

Part-2



THE UNIVERSITY OF
SYDNEY

E-Health:

More than just an electronic record

Institute of Health and Management Research
The IHMR University, Jaipur
[MBA Hospital & Health Management]
2020

Period: [2019-2021]



IIHMR UNIVERSITY

Objectives of the course

- The fundamentals of eHealth and where it is heading.
- What kind of health data we are currently collecting and how it will transform healthcare in the future
 - How new technologies are helping health consumers participate in their own healthcare
 - How eHealth can improve the coordination and efficiency of healthcare and what the barriers might be.



Learning Methodology

- ❖ Video lectures
- ❖ Additional reading materials
- ❖ Assignments
- ❖ Quizzes



What is E-health?

Health in the hands of consumers. This includes the use of apps, websites, social media, and wearable devices.



E-Health



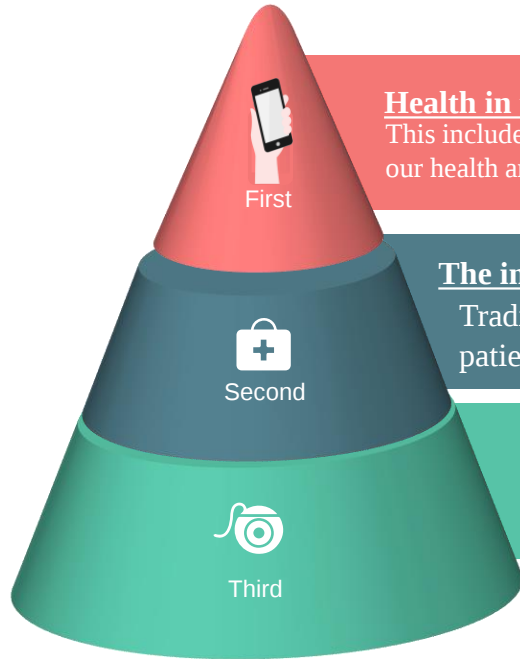
01 Electronic health record and Devices usually in the acute sector.

02 Support communication between healthcare providers, and healthcare consumers

03 Used in the context of rural practice to reduce travel time for both practitioners and healthcare consumers

04 Empower health professionals and health consumers to be more active participants.

Model for E- Health



Health in the hands of consumers

This includes the growing use of wearable devices, apps, and social media to monitor and report on our health and wellness.

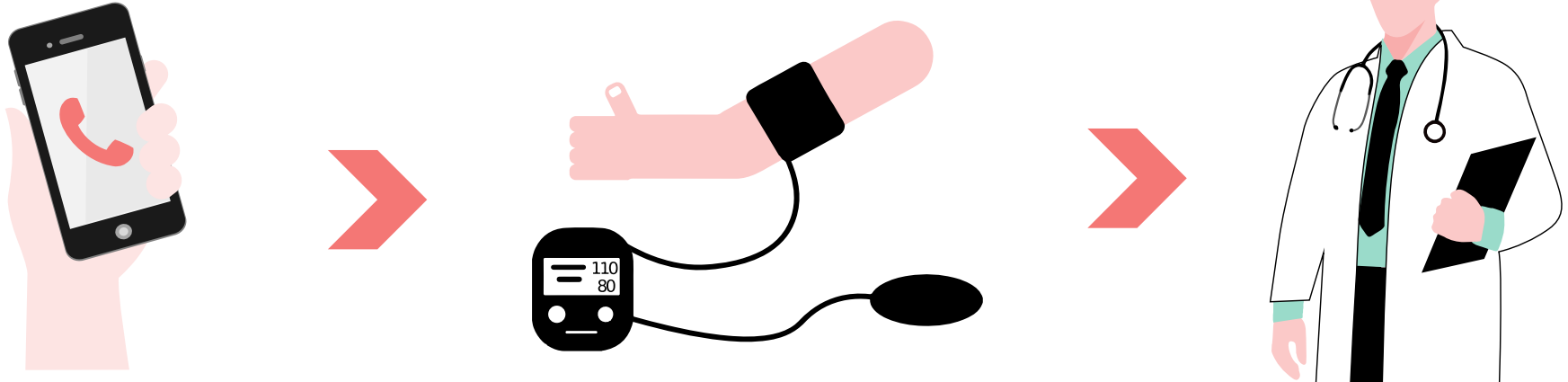
The impact of new technologies on how health professionals communicate with patients

Traditionally this has been referred to as Telehealth simply video conferencing for rural patients. It also includes emerging areas such as health coaching and maintenance of fitness.

Data records in the quantified self

This includes how we store data in traditional medical records through to how we store data associated with devices and apps.

Mobile Apps for Health



The use of apps, mobile devices, sensors is commonly referred to as mHealth or Mobile Health and it represents a significant and ever-changing component of eHealth.

Impacts

- Education & Awareness
- Helpline for Assessment
- Data collection
- Disease and Epidemic Outbreak Tracking
- Self Monitoring
- Reduce Unnecessary admission.
- Informed Decisions to improve outcomes

76%

of Indian healthcare professionals use digital health record.



Health Information online

Information Age

consumers are turning to the internet for information that can help them self-diagnose.



Role of health professional

From the coach, collaborator, and facilitator of the consumers own health journey.



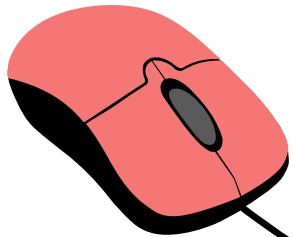
Rating Services

People can comment and ask questions and share their experiences. So, it builds this interesting virtual community.



Suggestions

It gives the reader more of an overall view of this topic and how it applies to them.



Data and the “Quantified Self”

Data and Digital Health Record

**Digitizing paper records is clearly beneficial.
Aggregate medical records can be used to provide
regular downstream information on individual team**

**Medical
History**



**Patient Vital
Signs**

**Follow-up
Consultations**



**Patient
Centered**

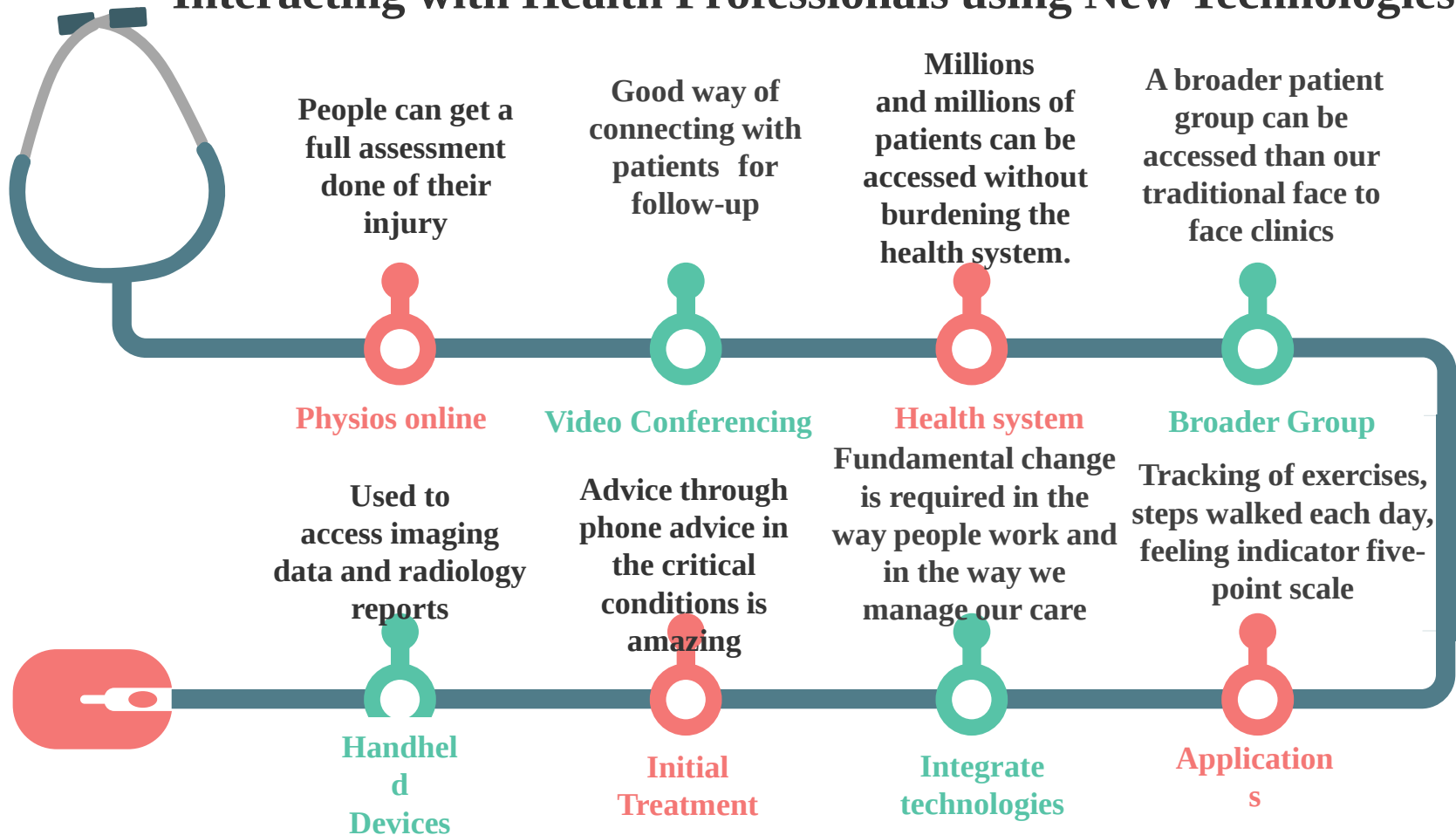
**Organization
Performance**



**Improve
Quality of
Care**



Interacting with Health Professionals using New Technologies





Aarogya Setu Application

-a Bluetooth-based Covid-19 Tracker

The stated purpose of this app is to spread awareness of COVID-19 and to connect essential COVID-19 - related health services to the people of India. This app augments the initiatives of the Department of Health to contain COVID-19 and shares best practices and advisories



The app will alert users if they come in proximity to an infected person.



Inform users about best practices & relevant medical advisories.



The app is privacy first by design & available in Android and iOS.



The App has highly scalable architecture & is available in 11 languages.

How Does it Work



Medlife deliver to 25,000+ pin codes over 2500+ cities and 29 states across India. Medicine home delivery made easy.



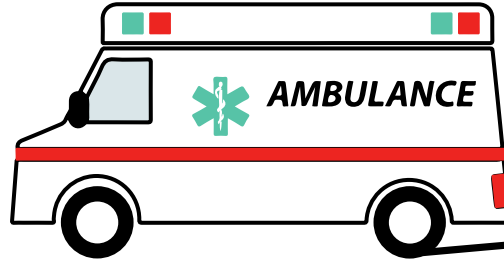
Medlife

Med
Life

Medlife International, is an India online platform, which provides pharmacy, diagnostics, and e-consultation in India.

- Pharmacy - Buy medicines online
- Medlife Labs -Book free collection of samples from home for laboratory tests
- Doctor Consultation - Consult a doctor from the comfort of your home
- OTC - Order healthcare and wellness products
- Medlife Essentials - Get herbal supplements and varied range of accessories.





Thank You

#stayhomestaysafe

