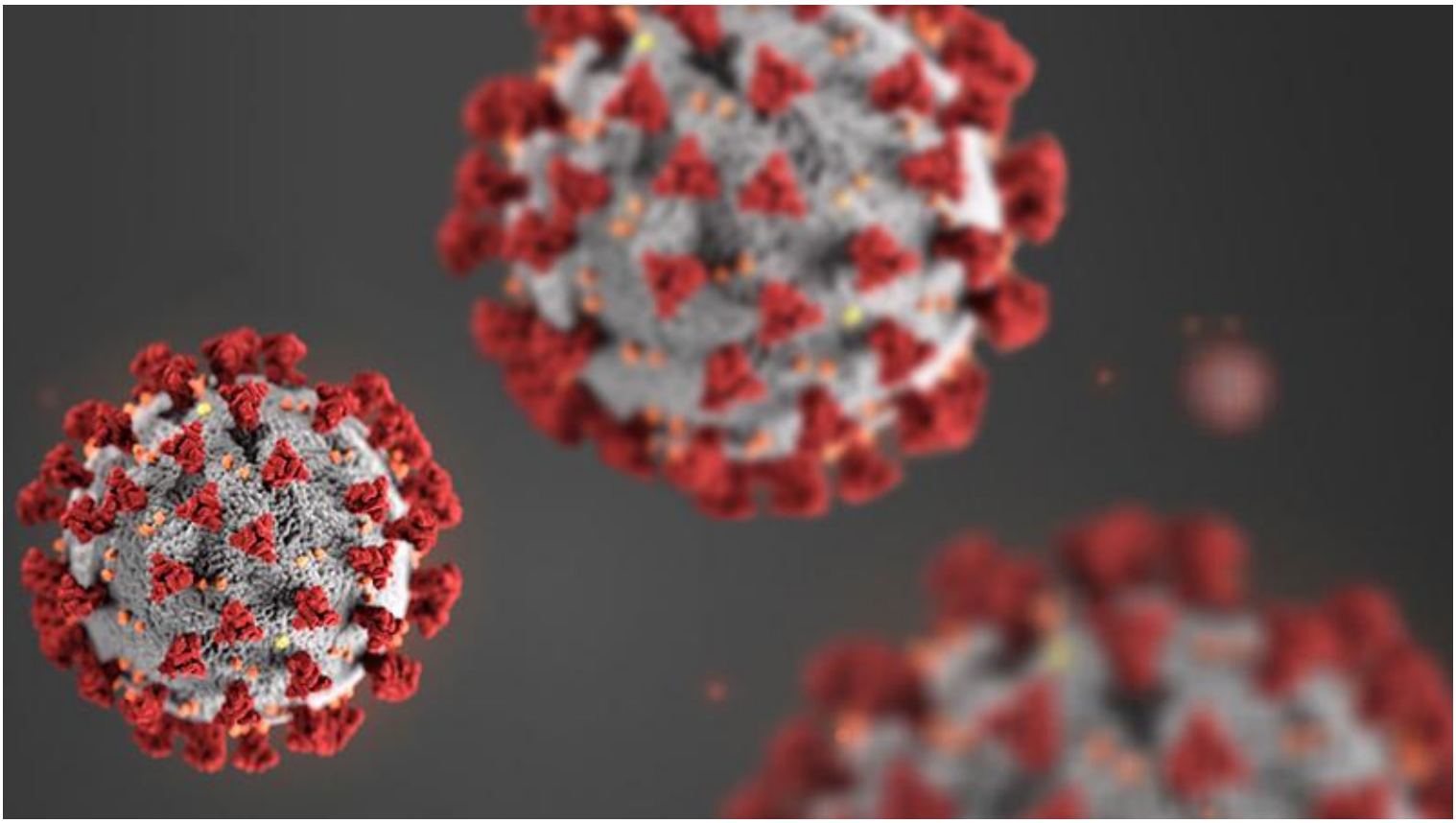
STRATEGY for COVID CONTAINMENT

FICCI Recommendations



June 2020

FICCI organised a virtual Roundtable with leading epidemiologists, public health experts and members from healthcare industry to deliberate on the future strategy for COVID containment
on Saturday, June 6, 2020.

The recommendations arising from the deliberations has been compiled into this Report.

Key Recommendations

Preparedness of the Healthcare System

- Reimagine the **public health preparedness** to appropriately address the infectious disease outbreaks
- **Decentralize** the healthcare system with focus on primary healthcare
- ***Anticipate- Coordinate- Act*** must be the mantra for preparedness through effective collaborations
- Invest on developing **Smart Health & Wellness Centers** through public-private partnerships
- **Public health experts** need to be an integral part of planning and a dedicated cadre of public health specialist should be created immediately
- Implement the **National Airborne Disease Control Guidelines**

Containment of COVID-19

Strategy

- COVID-19 should be declared a **notifiable disease**
- The focus should now be shifted to '**controlled transmission**' with the objective to flatten the curve
- There is a **need for extensive data interpretation** to help in future projections
- Herd immunity will develop in a natural way, it should not be our target, but should be used for calculations and projections
- Additional parameters like '7-day moving averages' will help in determining the speed and extent of the virus spread
- Distribution of clusters may be done according to the distribution of medical colleges, wherever possible
- While planning adequate response for COVID patients, the **non-COVID patients should not be ignored**

Capacity Building

- There is an urgent need to build capacities of healthcare workers at all levels to combat the pandemic in an appropriate way
- Frontline workers should be adequately trained on the use of appropriate PPE according to the job- whether it is surveillance or caring of the COVID patients in healthcare facilities

Community role

- There is a need to develop sustainable strategies to avoid COVID
- Human behavior is critical to manage this disease, there is a need to strengthen the risk communication strategies through community engagement
- Strengthen the psycho-social support to frontline workers as well as COVID patients and their families

Testing

- Testing needs to be ramped up, especially in most affected states

- **RT-PCR should be done for all symptomatic patients**, considering one symptomatic patient is equal to 30 asymptomatic patients.
- It is crucial for diagnostic labs to **declare the viral load** of all RTPCR tests, to enable proper assessment of infection spread. This should be included in the regulation by ICMR

Quarantine

- Effective management of quarantine centers as well as reverse quarantine is essential
- The **lockdown restrictions should be loosened only gradually**, ensuring that all the vulnerable, especially the elderly and children below 10 years age, are safeguarded

Treatment

- We need to stick to **evidence based and practical PPE usage** guidelines
- Sufficient number of **oxygen concentrators** need to be made available across the country to reduce the number of needless deaths
- **Simple COVID facilities** in all local communities and nursing homes may be prepared with a protocol developed for treatment and monitoring of patients by healthcare workers in such a facility

Mortality

- Autopsies should be done in India to gain knowledge on the trajectory of this infectious disease.

Background

Today, it is evident that a further rise in COVID-19 infection is expected as the country goes into Unlock 1 mode. While the four lockdowns have helped us to slow down the virus spread and also helped us prepare our healthcare infrastructure, undertake capacity building and sensitize communities to tackle the outbreak. It is now time to gradually open up the decelerated economy. However, this would require a greater effort from the Central and State governments as well as the community to contain the virus to the maximum extent possible.

The Government- Center and the States have used a strategic approach to contain the spread of the COVID-19 virus. An aggressive containment strategy was launched through geographic quarantine, extensive contact tracing and active search for cases, testing all suspect cases and high risk contacts, isolating all suspect / confirmed cases and providing medical care, quarantining contact, implementing social distancing measures and intensive risk communication in containment zones with the objective to break the chain of transmission thus reducing the morbidity and mortality due to COVID-19.

While initial lockdown phases were more stringent, some relaxation has been provided in the subsequent ones to allow some extent of economic activity, considering the immense negative impact on the economy.

The lockdown in the country has now been extended till June 30, but the restrictions have been kept limited to containment zones. The new guidelines by the Home Ministry, which have been termed as Unlock 1, have allowed re-opening of shopping malls, restaurants, hotels and religious places from June 8. This means that there may be further surge in the COVID infected cases from mid-June.

India's Cluster Containment- the current strategy

The Indian government has drawn out a containment plan as clusters posing high risk of further spread of COVID-19 cases had emerged in several states. The cluster containment strategy is to contain the disease within a defined geographic area by early detection of cases, breaking the chain of transmission and thus preventing its spread to new areas.

Large-scale measures to contain COVID-19 over large territories have been tried in China. Mathematical modelling studies have suggested that containment might be possible especially when other public health interventions (non-pharmaceutical) are combined with an effective strategies viz social distancing, wearing of masks, hand hygiene etc.

In the fourth phase of lockdown, States and Union Territories were given the power to identify red, orange and green zones, and containment and buffer zones inside red and orange zones, to enable more effective containment. In the current phase of lockdown or Unlock 1, while red, orange and green zones will be decided by the states, the district administration and local urban bodies will identify the containment and buffer zones with technical inputs at local level.

Containment zone- A containment zone refers to a specific geographical area where positive cases of coronavirus are found. Strict movement restrictions are put in place in such areas to prevent further spread of the virus. The perimeters of the containment zone are decided based on the number of positive cases in the area, contact tracing history and population density.

Buffer Zone- The adjoining blocks of the affected district or rural districts of the affected city are known as buffer zones.

A number of variables determine the success of the containment operations through geographic quarantine. These are-

- number and size of the cluster/s
- effectiveness of geographic quarantine
- how efficiently the virus is transmitting in Indian population, taking into account environmental factors especially temperature and humidity
- public health response in terms of active case finding, testing of large number of cases, immediate isolation of suspect and confirmed cases and quarantine of contacts
- geographical characteristics of the area (e.g. accessibility, natural boundaries), population density and their movement (including migrant population)
- ability to ensure basic infrastructure and essential services

For institutional mechanisms and inter-sectoral coordination at the national level, the National Crisis Management Committee (NCMC) and the Committee of Secretaries (CoS) have been activated. The NCMC will coordinate with health and non-health sectors on issues flagged by the health ministry.

The government had also charted a **mitigation plan**, in case the containment strategy fails. As part of a standard protocol, the focus of a mitigation plan usually is on upgrading health infrastructure, adding more intensive care unit (ICU) beds, increasing ventilators and improving oxygen support mechanisms, and increasing testing capacity.

While the Centre is working towards a cluster containment, many States are planning their own approach for containment/ lockdown.

Karnataka has been a strong advocate to bring down the area of a containment zone to smaller units like wards and gram panchayats rather than districts was accepted by the centre. However, a sharp surge in cases over the last two weeks threatens to jeopardise its plans of reopening more categories of businesses and activities to resume operations in the state.

West Bengal's health department is preparing an SOP for reducing the perimeter of containment zones to ensure that people in the state are not scared or inconvenienced.

Maharashtra, Delhi, Rajasthan and Punjab have extended their lockdown till June 30th with no relaxations in containment zones, owing to the surge in cases. Some other States like Mizoram, Madhya Pradesh have declared the lockdown only till June 15th.

Given these variations and the expected surge in COVID infections in the coming days, especially in states like Delhi, Maharashtra, Tamil Nadu and West Bengal, it is important that we are **prepared with an alternate plan or a further strategy for the containment in Red Zones**.

In this context, **FICCI organised a web-based Roundtable with leading epidemiologists, public health experts and members from healthcare industry to deliberate on the future strategy for COVID containment**, on Saturday, June 6, 2020 from 3:30 pm to 5:00 pm. The recommendations arising from these deliberations are provided in the next section.

Key Discussions during the Roundtable

Emergence of COVID Pandemic in India

- First COVID case appeared in India on 30th January 2020 in Kerala, 100th case on 15th March. On 28th March 2020 India witnessed its 1000th case, by 29th April it reached the 30,000 mark. On June 6th it crossed the 2.37 lakh mark, with bulk load of approx. 20% shared by Maharashtra, followed by 10% of cases pertaining to Delhi.
- States like Bihar, UP, Jharkhand, Uttarakhand and Himachal Pradesh are now getting affected due to reverse migration. However, there are pockets of excellence, like Kerala, who have been successful in management of COVID by keeping the numbers low.
- In the initial phase, we had challenges with respect to non-availability of testing kits and other resources like ventilators, PPEs, N95 masks and adequate number of trained frontline healthcare workers along with limited information on the disease. Today, given the extensive research over past few months, we have plethora of publications worldwide and huge amount of information on the web, leading to various challenges.

India's Preparedness for Infectious Disease Outbreaks

Pandemics have been a part of the world history, impacting not only the society and the trade, but also global connectivity. Yet, the impact of COVID pandemic has been one of the most unprecedented.

In terms of transmission propensity, COVID is much more dangerous as compared to previous outbreaks like SARS, MERS and NIPAH, where the transmission was from symptomatic people. It is the first time that the world is witnessing such high transmission levels from asymptomatic or pre-symptomatic people hence making it difficult to contain. Tuberculosis (TB), on the other hand, is similar in terms of transmission occurring from mildly symptomatic patients.

Traditionally India has not invested sufficient resources on public health infrastructure development as well as to anticipate a response to sudden large outbreak of infectious diseases. Despite the significant TB burden in India and sporadic outbreaks of other infectious diseases including chicken pox, our health infrastructure is still ill equipped in terms of adequate ventilation, triaging, administration control, identifying people who could transmit and isolating them to tackle air-borne infections at the tertiary level. Even at the primary care level, the preparedness for such outbreaks is largely inadequate in both- public as well as private sectors.

There is a need for enhanced investments in healthcare infrastructure and resources through collaborations between public and private sector, in close coordination with the public health

experts, with a defined strategy on ***Anticipate- Coordinate- Act*** for better preparedness for such outbreaks.

Experiences from some of the States:

Kerala Experience

Kerala being the first state to register first COVID case, has only 1700 active cases and 15 deaths so far in a population of 35 million. Strong political, administrative will as well as proactive leadership have played a vital role to contain the numbers. Decentralized health planning through local self-governments since 1996, incremental investments in primary healthcare and social determinants of health have paved way for the resilience and strengthening the health system.

Key approaches used for containing the outbreak:

- **Proactive surveillance** for cases from early January2020
- **Diligent contact tracing** to identify primary and secondary contacts of cases
- **Quality Home quarantine** was insisted for all travelers from affected countries and all contacts which was monitored with the help of local administration, police, ward members and the community
- **Testing of all eligible as required for each stage of epidemic** Initially all returnees from Wuhan and affected countries were screened and later all eligible delineated in the guidelines were tested
- **Isolation of cases in health care facilities** and providing early treatment
- Giving a **humanitarian face** to all the epidemic activities. The district and local self-governments ensured that the medical, non-medical needs as well as social needs of for those kept in quarantine were met. Treatment and testing was provided free to all including foreigners. Guest laborers from other states were given food through community kitchens and their welfare was given priority
- **Capacity building** at all levels. An innovative campaign BREAK THE CHAIN was launched by the government in March 2020. This mass media campaign appealed to and motivated the community to adopt **SMS** (S- Sanitize hands frequently using Soap, M- Mask, S- Social distancing)
- **Unity of Command from State Control Cell** through timely advisories and guidelines from the government
- **Effective coordination** of all stakeholders under the District Collectors through District Control Cells. Sixteen dedicated teams looking into

'BREAK THE CHAIN'
Campaign

SMS
S- Sanitize hands frequently using Soap
M- Mask
S- Social distancing

different aspects met and reviewed the situation every day for further action. These teams included team for psychological counselling and cyber monitoring for spread of false news regarding the epidemic

- **Empowering the community** for room quarantine, reverse quarantine, behavioral changes involving local self-governments for its robust implementation.
- **Communication** -Transparent and up-to-date regarding number of cases and deaths
- **Pre-registration** was enforced after strict lockdown period for the people who are returning from affected areas either from other states or from outside India, to initiate timely quarantine
- **Testing for community transmission** Weekly 3000 people are being tested (RT-PCR) from non-COVID situations as a part of the surveillance. This is being done in certain groups of people like healthcare workers, local self-government with an objective to determine if there is community transmission or if there is any case without any epidemiological linkage. Rapid Antibody test for 10,000 is also introduced for sero-surveillance.

- Since we have to **live with the virus** till a vaccine or effective treatment stalls the natural course of the epidemic through the establishment of a herd effect, the focus will be shifted to community education for behavioral change for prevention, **room quarantine** for at risk and **reverse quarantine** for the vulnerable**.** This strategy ensures that **controlled transmission** occurs among the healthy, the vulnerable are safeguarded, mortality reduced and that the cases do not overwhelm the health system thereby maintaining the flattening of the epidemic curve

The focus will be shifted to community education for behavioral change for prevention, **room quarantine** for at risk and **reverse quarantine** for the vulnerable

Maharashtra Experience

Mumbai has 60% of Maharashtra's case load and has been worst affected in densely populated slums like Dharavi and Deonar. Topography of Mumbai is such that any kind of enforcement or health preparedness is a challenge. Cluster containment has been through large zones since only large outbreak containment areas with absolute sealing can help.

People have been facing **economic as well as social challenges**, especially in the slums. Adhering to social distancing norms is extremely difficult in these areas as 10-12 people live in one house and use common toilets and taps in the community.

Surveillance has also been a huge challenge. In initial days one team of healthcare workers visited 150-200 houses, which was later reduced to 50-75 houses per day in a six-hour shift, for

quality surveillance. They check symptoms like fever, oxygen levels through pulse oximeters as well as presence of any comorbidities.

Home quarantine was not possible in slums so the authorities have been relying on institutional quarantines, mainly in schools and hotels. Investigations suggested that the testing-quarantine ratio has been disproportionate in the city, with only 300 people quarantined for 800 tested. New facilities have now been prepared for large scale quarantine. **High mortality rate** in the city is the result of late detection of cases as well as due to comorbidities. There was also low availability of ICU beds with ventilators, which has now been ramped up.

Mumbai needs a multi-pronged, multi-sectoral approach through the involvement of NGOs and local authorities through:

- extensive institutional quarantine
- increased testing for all suspects
- clinical preparedness
- community participation

Karnataka Experience

While Karnataka was able to contain the virus in the initial days with the help of experts, there has been a spike in cases recently due to influx of migrants from neighboring states/districts. With the implementation of exit strategy, it is expected that there will be a further surge in cases, not just in large cities and transport hubs, but other regions as well. While the State is continuing with protective measures and containment zones, the authorities are trying to loosen the restrictions gradually. This will help **slow down the spread and reduce mortality in near future**, which is important so that our healthcare system- whether private or public- can provide adequate support.

The state is also emphasising on **prevention of transmission through information and education**, but the importance of dissemination of correct information cannot be undermined. Further, too much information may lead to stigma, especially in rural areas, which needs to be prevented. Tuberculosis is stigmatized in the society due to the perceived risk of transmission from TB-infected individuals to susceptible community members. To avoid such situations, we need to work towards **reducing discrimination** based on COVID.

Additional parameters like '**7-day moving averages**' will help in determining the speed and extent of the virus spread

Since it is expected that there will be a further surge in COVID cases in the state, additional parameters like '**7-day moving averages**' will help in determining the speed and extent of the virus spread. The local

authorities needs to focus on data received from large as well as small jurisdictions to help plan for future containment strategy.

Delhi Experience

While Delhi is witnessing an increase in number of COVID positive cases every day, it has different set of challenges as compared to some other States since it comprises of urban areas, urban slums as well as rural areas. Additionally, there are pockets like Nizamuddin which required a different strategy for containment. Delhi has a total of 148 containment zones with all 11 districts falling under containment zones.

Public health experts and community medicine played an important role right from the beginning of the pandemic by initiating planning at micro, meso (mid) and tertiary levels.

COVID tool, approved by NITI Aayog, has been developed for the **Corona Committees** for 6 lakh panchayats; and a similar tool for urban areas will be implemented

At primary level, apart from the healthcare workers, the community itself is a major stakeholder. Hence, a **COVID tool**, approved by NITI Aayog, has been developed for the **Corona Committees** that will be established in the 6 lakh Panchayati Raj institutions soon. A similar tool has been developed by public health experts for wards and towns, which will be implemented by the Ministry of Urban Development for which necessary processes have been initiated.

At grassroots, public health experts and frontline workers have been working on creating awareness on preventive measures (like hand hygiene, social distancing, mask usage, avoid social gatherings), keeping in mind the socio-cultural milieu of population. **Interventions are developed at micro level according to needs of urban and rural population due to different sociocultural milleau and** the strategies for urban segment of Delhi may not work in the rural segment.

For effective surveillance **rapid response teams** have been making house visits along with nodal officers and frontline workers for identifying ILI/SARI cases. Each team covers 50 households. The data collected is reported online on the IDSP portal which reflects the progression of the disease.

District containment plans should be suitably tailored to local needs

At district level, there is a need to prepare and review the district containment plan so that it is suitably tailored to local needs. The district plans can be prepared by public health experts of Medical College districts located in the district by respective Departments of Community Medicine. In case the district does not have Medical College, the containment plan can be prepared by public health experts of adjascent district.

Further, strengthening of the peripheral health facilities will help reduce the load on meso/mid-level and tertiary level facilities and will go a long way in containment of the pandemic.

At tertiary level, apart from policy and program planning, there is a need for data interpretation by public health experts to help in future projections for pandemic and requirements for PPEs, Beds, Ventilators, HFNCs, Oxygen supply, along with provision of appropriate teams like intensivists and microbiologists.

Community Transmission and Herd Immunity

There has been concern by governments in admitting community transmission in several parts of the country, which is not essentially the right approach to deal with the virus. During the ongoing community transmission in parts of India, the otherwise successful models like in Kerala cannot be applied, especially to large cities where contact tracing and containment of virus is difficult. In such cases, there is a need to slow down its spread through **gradual unlocking**, **improving public health facilities** through collaborations, reducing mortality through **early detection** and **protecting the elderly** through home quarantine. Mortality experiences of UK and France show that India will face high mortality in the coming months due to COVID, out of which 90% are estimated to be in the age group of 60 years and above.

We need to slow down the spread of the virus through gradual unlocking, improving public health facilities through collaborations, reducing mortality through early detection and protecting the elderly through home quarantine.

COVID virus is **highly immunogenic** and evidence shows that a vaccine is very likely to materialize. However, the vaccine will be beneficial only if it is developed with adequate precautions and evidence. Till then, we need to tackle the spread at individual level. The society will now need to learn to live with Corona just like we have been doing with Measles or TB and protect themselves through precautions.

Herd immunity will automatically come into the system in a natural way, as it does for any disease, but it should not be our target. We should indeed include it in our calculations for better preparedness. Approximately 200 people develop immunity to COVID with each COVID caused death. Evidence suggests that the infection spread is higher in cities than in rural areas, and since major part of the population lives in rural India, at least 50% of the population will be less infected, which means we will obtain herd immunity. However, it is important to understand that herd immunity is based on the location and epidemics evolve differently in different locations.

Herd immunity will automatically come into the system in a natural way

India is fortunate to have a young population so overall mortality will be less, but our preparedness for emergency admissions in hospitals needs to improved.

India and WHO

Leadership and coordination are vital for any type of emergency response. In India, there has been a strong leadership since the outbreak of coronavirus and WHO has been working in association with the government to develop appropriate interventions. Apart from the central government, other stakeholders- the States, the private sector as well as the civil society organisations have been involved in the response strategy since the beginning.

However, since India is a continent in itself, the interventions need to be tailored according to regions and strategies need to take into account the **local challenges and solutions**. WHO has been supporting the government to help meet the local needs.

Since COVID is a new disease, WHO has been providing **guidance** on various issues only on the **basis of data analysis and clear evidence**, as well as taking into consideration the consequences. Hence, there have been changes and up-dations in guidelines, for example, the use of mask for general public and use/dosage of drugs for the treatment.

WHO has also been working towards awareness generation on the disease as well as alleviation of fear from the community. It was observed that many people do not come forward for testing even in the containment zones. Since human behavior is critical to manage this disease, there is a need to strengthen the **risk communication strategies**.

Recommendations

Preparedness of the Healthcare System

- There have been systemic gaps in the country's ability to invest in public health system. This is an opportune time to reimagine the public health preparedness to appropriately address the infectious disease outbreaks
- Investment for current COVID as well as Non-COVID response is critical owing to the expectation of frequent outbreaks of infectious diseases in the future as well as the large burden of non-communicable diseases respectively
- There is need for decentralized healthcare system with focus on primary healthcare
- ***Anticipate- Coordinate- Act*** must be the mantra for preparedness by both public as well as private sector with specific focus on primary care through effective collaborations
- To augment primary care in the country we need to invest on developing **Smart Health & Wellness Centers** through public-private partnerships
- **Public health experts** need to be an integral part of planning right from the primary healthcare level. There is need for creating a dedicated cadre of public health specialist- medical as well as non-medical for appropriate capacity building and training
- **National Airborne Disease Control Guidelines** were invoked years ago in India, this is an opportune time to develop and implement them

Containment of COVID-19

Strategy

- COVID-19 should be declared a **notifiable disease**
- Implementation of a strong Containment Plan is the need of the hour
- Pandemic response needs multi-pronged, multi-sectoral approach with inclusion of public health experts at all levels including for isolation wards as well as quarantine centers for effective response to the outbreak
- The focus should now be shifted to '**controlled transmission**' with the objective to flatten the curve. There is a need to slow down the spread of the virus, improve the provision of care and minimize mortality through early detection
- Herd immunity will automatically come into the system in a natural way, as it does for any disease, but it should not be our target. We should indeed include it in our calculations for

better preparedness. Further, herd immunity is based on the location and epidemics evolve differently in different locations, so the patterns cannot be generalised

- There is a need for **extensive data interpretation** to help in future projections, along with provision of appropriate teams like microbiologists and public health experts. Use of Integrated Disease Surveillance Programme (IDSP) portal should be strengthened
- In order to plan interventions, multiple factors should be considered i.e. social impact, modelling, progression of disease and projection
- Additional parameters like '7-day moving averages' will help in determining the speed and extent of the virus spread
- The district containment plans should be **suitably tailored to local needs**, especially in regions with large socio-cultural diversity, through following considerations for implementation:
    - Diversity of population in India
    - Socio-economic status and vulnerability of the population
    - Age (given that elderly population is more vulnerable to COVID)
- Distribution of clusters may be done according to the distribution of medical colleges, wherever possible, so that the patients can be taken care of appropriately. The peripheral health facilities also need to be strengthened to help reduce the load on mid- and tertiary-level facilities
- Testing, tracing, tracking & monitoring, treatment, and teamwork are the key to containment
- While planning adequate response for COVID patients, **the non-COVID patients should not be ignored** in any way, given the already high burden of non-communicable and other infectious diseases in the country

Capacity Building

- There is an urgent need to build capacities of healthcare workers at all levels to combat the pandemic in an appropriate way. For states like Maharashtra, Delhi, where the incidence is high, governments should carry out **rapid trainings in medical colleges** to tackle the shortage of manpower. The government has already started employing interns in fever clinics, which should be adopted across the country
- Frontline workers should be adequately trained on the use of appropriate PPE in accordance with the job- whether it is surveillance or caring of the COVID patients in healthcare facilities

Community role

- The community needs to acknowledge that COVID is here to stay and we should learn to live with it like we have been doing with Measles or TB. There is a need to develop **sustainable strategies to avoid COVID**. Adoption of adequate protection measures at the individual level is vital- like SMS approach (S- Social distancing, M- Mask, S- Sanitize hands)
- Human behavior is critical to manage this disease, there is a need to **strengthen the risk communication strategies** through community engagement. Too much information may lead to stigma, especially in rural areas, which needs to be prevented. There have been instances where people living in containment zones are not disclosing illness due to fear of stigma discrimination. To avoid such situations, we need to work towards reducing discrimination based on COVID
  - Stigma originates from fear, and it needs to be reduced through adequate capacity building at the community level
  - At the levels, there is need for proper demystification of the disease as it was done for HIV/AIDS when there was more clarity on the disease and its treatment. It has now been now mainstreamed into chronic infection
  - There is a need for strengthening the psycho-social support to frontline workers as well as COVID patients and their families
- Traditional and ancient knowledge from Egypt and India shows that the SARS COV2 virus endures for days on plastic and metal but disintegrates almost immediately after landing on copper surfaces. There is additional evidence that contact with copper causes rapid inactivation and irreversible destruction of viral RNA. Hence, copper lining on door knobs, taps and every public facility in hospitals can help reduce infection spread considerably

Testing

- Testing needs to be ramped up, especially in most affected states
- **RT-PCR should be done for all symptomatic patients**, considering one symptomatic patient is equal to 30 asymptomatic patients. Recent Wuhan Study demonstrated that for every symptomatic COVID case, there are 30 asymptomatic cases. Since, India's density is similar to Wuhan, every positive case means 30 asymptomatic people are infected
- It is crucial for diagnostic labs to **declare the viral load** of all RTPCR tests, to enable proper assessment of infection spread. This should be included in the regulation by ICMR

Quarantine

- The quarantine and isolation centres need to be equipped with adequate facilities and supplies. Effective management and Reverse Quarantine is essential for the people who

are returning to the state either from other states or from outside India. This should be done in close coordination with the local administration, Police, ward members and the community

- The lockdown restrictions should be loosened only gradually, ensuring that all the vulnerable, especially the elderly and children below 10 years age, are safeguarded

Treatment

- We need to stick to **evidence based and practical PPE usage guidelines**. Different professional societies / government agencies and ministries have been providing guidelines which are in variation to those provided by WHO or CDC. Even the published evidence is varying, which is making the day to day functioning in a hospital very difficult
- Sufficient number of **oxygen concentrators** need to be made available across the country to reduce the number of needless deaths. Evidence from Italy, New York and Mumbai shows that mortality rate increases with high usage of ventilator. Most patients just need a timely oxygen therapy, which can prove life-saving. Many countries use ECMO Extracorporeal membrane oxygenation, which can be adopted in India
- There is need for simple **COVID rooms** with oxygen facility and essential medicines rather than sophisticated ICUs- in both government and private hospitals. This will help in increasing the COVID bed capacity in the hospitals. A patient may remain febrile till 5th to 7th day, but as fever subsides, complexities may appear all of a sudden, similar to Dengue, hence requiring hospitalisation and oxygen supported beds
  - As there is shortage of oxygen beds in Delhi, the Govt. of NCT of Delhi has directed all asymptomatic and mildly symptomatic people with respiratory rate of less than 15 per minute to be discharged immediately and kept at home, those with respiratory rate between 15 to 30 per minute to be kept in isolation ward and above 30 per minute to be kept in ICU
- Simple COVID facilities in all localities (like RWAs, high rise societies, colonies) and nursing homes should be prepared with:
  - a room with 1-2 beds
  - Oxygen concentrator enough to produce 5 litres of oxygen (O2) per minute
  - SPO2 monitor
  - Air purifier with 10 exchanges per hour
  - essential medicines
- A protocol can be developed for treatment and healthcare workers can monitor patients in such a facility till the patient can be shifted to a facility where ventilator is available. Simple SPO2 monitoring will alert fall in O2 saturation and change in Heart Rate

- There should be support from the government for upgrading biosafety levels in healthcare facilities

Mortality

- Although data has indicated that there is less mortality in India, it should be considered that mortality cases due to COVID at any time are actually double the reported number. This may be due to unreported cases, reports coming in late, RT-PCR false negatives or primary cause of death stated as non-COVID etc.
- **Autopsies** should be done in India to gain knowledge on the trajectory of this infectious disease.

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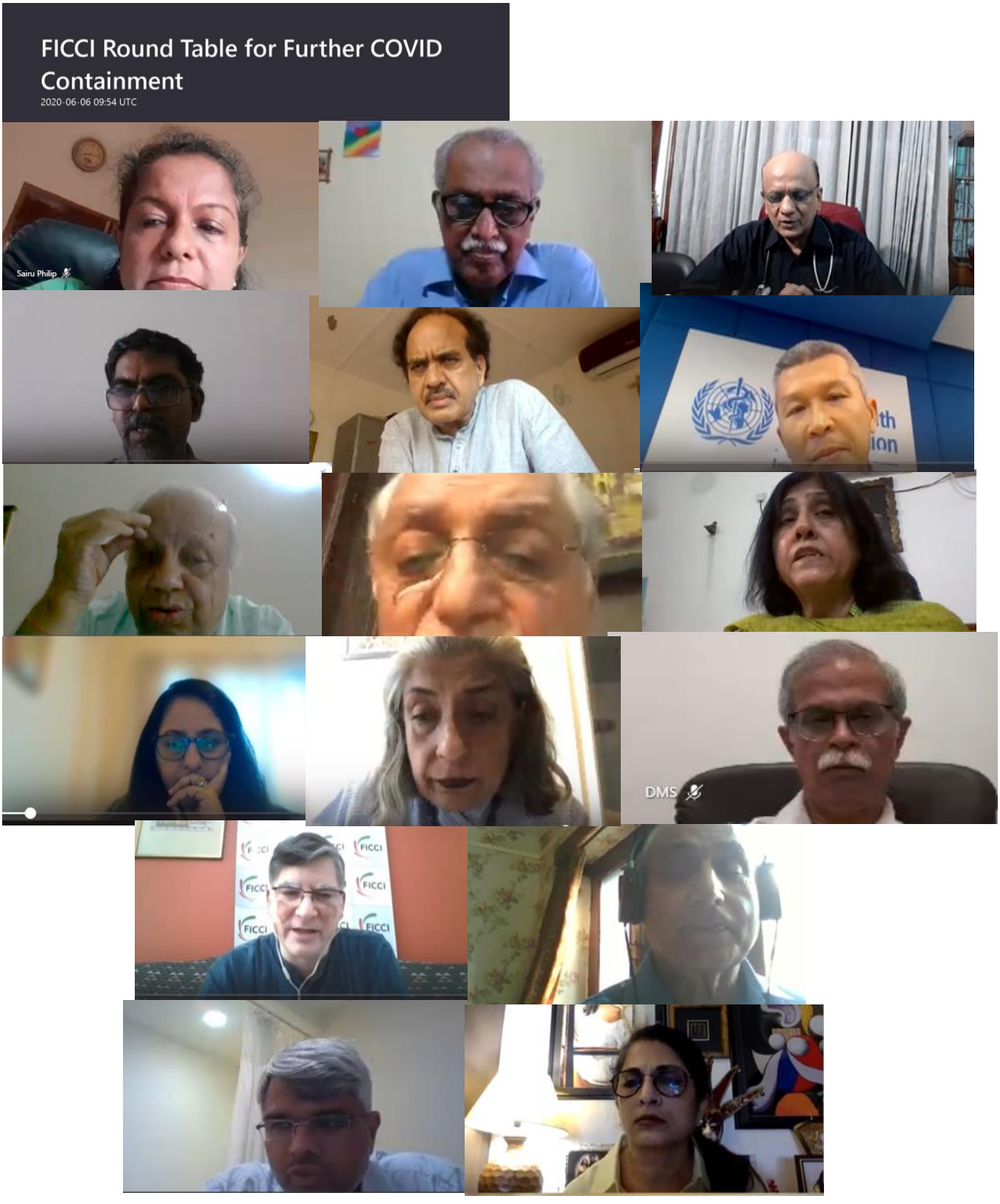
14. **Mr Gautam Khanna**, Co-Chair-FICCI Health Services Committee & CEO, Hinduja Hospital
15. **Dr N Subramanian**, Co-Chair-FICCI Health Services Committee & Director Medical Services, Apollo Hospital

16. **Dr Narottam Puri**, Advisor- FICCI Health Services Committee; Board Member and Former Chairman- NABH; Advisor-Medical Operations and Chairman- Fortis Medical Council, Fortis Healthcare,
17. **Dr Nandakumar Jairam**, Chairman, CEO & Group Medical Director, Columbia Asia Hospitals India
18. **Ms Meenakshi Datta Ghosh**, Former Secretary- Ministry of Panchayati Raj & Former Special Secretary- Ministry of Health & Family Welfare, GoI
19. **Dr K K Agarwal**, President- Confederation of Medical Associations in Asia & Oceania and Heart Care Foundation of India

FICCI Secretariat

20. **Mr Dilip Chenoy,** Secretary General, FICCI
21. **Ms Shobha Mishra Ghosh,** Asst Secretary General, FICCI
22. **Ms Sarita Chandra**, Joint Director, FICCI
23. **Ms Shilpa Sharma**, Consultant, FICCI
24. **Ms Prachi Pal**, Sr. Assistant Director, FICCI


FICCI Round Table for Further COVID Containment
2020-06-06 09:54 UTC
Sairu Philip
DMS

About FICCI

Federation of Indian Chambers of Commerce and Industry

Established in 1927, FICCI is the largest and oldest apex business organisation in India. Its history is closely interwoven with India's struggle for independence, its industrialization, and its emergence as one of the most rapidly growing global economies.

A non-government, not-for-profit organisation, FICCI is the voice of India's business and industry. From influencing policy to encouraging debate, engaging with policy makers and civil society, FICCI articulates the views and concerns of industry. It serves its members from the Indian private and public corporate sectors and multinational companies, drawing its strength from diverse regional chambers of commerce and industry across states, reaching out to over 2,50,000 companies.

FICCI provides a platform for networking and consensus building within and across sectors and is the first port of call for Indian industry, policy makers and the international business community.

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