



Indian Public Health Association (IPHA) and Indian Association of Preventive and Social Medicine (IAPSM)



Joint Statement on COVID-19 outbreak in India: Review of Current Strategy and Way Forward

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by

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Table of Contents



S. No.	Content	Page No.
1	Executive Summary and Action Plan	3-4
2	Epidemiology of Novel COVID-19	5-7
3	Strategies for control of Novel COVID-19 outbreak and recommendations	8-10
4	Recommendations	11-14
5	The Way forward	15-19
6	COVID-19 MYTHS vs. REALITY	20-23
7	Holistic Health	24-27



Executive Summary and Action Plan



- 1) Review lockdown, replace with cluster restrictions.**
- 2) Increase public awareness and practice of preventive and community measures.**
- 3) Ensure physical distancing with social bonding, avoid social stigma and ensure universal mask usage.**
- 4) Sentinel and active surveillance.**
- 5) Test, track and isolate with marked scaling up of diagnostic facilities.**



Executive Summary and Action Plan



- 6) **Rapid Response Teams.**
- 7) **Strengthening Intensive care capacity.**
- 8) **Optimal PPE for frontline workers.**
- 9) **Free sharing of data in public domain and Public Health Commission.**
- 10) **Increase health expenditure to 5% of GDP focus on public health system strengthening.**



Epidemiology of Novel COVID-19



1) Agent Factors:

- **Agent:** The agent of COVID-19 is a single-stranded RNA virus of genus beta coronavirus called SARS-CoV-2. This is the seventh coronavirus known to infect humans.
- **Origin of the Virus:** The origin of the virus is not fully understood. However studies have indicated that COVID-19 is a zoonotic virus.
- **Source of Infection:** Usually a case, or subclinical and asymptomatic case.
- **Period of infectivity:** Not clearly known. Few studies have observed median duration of viral RNA detection was 20 days (IQR 17.0–24.0).



Epidemiology of Novel COVID-19



2) Host Factors:

Age & Sex: COVID-19 affects all ages and both sexes. But data on individuals aged 18 years or less suggest that there is a relatively low attack rate in this age group (2.4% of all reported cases in China).

Close contact and human mobility: Close contact and human mobility is an important factor in the spread of infection.

Susceptibility: As SARS-CoV-2 is a newly identified pathogen, there is no known pre-existing immunity in humans. Based on the epidemiologic characteristics observed so far in China, everyone is assumed to be susceptible, although there may be risk factors increasing susceptibility to infection.

Immunity: SARS-CoV-2 is a newly emerging virus. The antibody response in infected patient remains largely unknown. The clinical value of antibody testing has not been fully demonstrated.



Epidemiology of Novel COVID-19



3) Environmental Factors:

Season: Seasonal effect is not well documented. But meteorological parameters are the important factors influencing the infectious diseases such as severe acute respiratory syndrome (SARS) and influenza.

Mode of transmission: Major modes of transmission are droplet and fomite. SARS-CoV-2 is transmitted via droplets and fomites during close unprotected contact between an infector and infected.

Incubation period: Incubation period varies between 2 days to 2 weeks. However, majority of COVID-19 patients have an incubation period of 3 to 7 days with the mean duration of incubation period of 5.2 days (95%CI, 4.1 to 7).



Strategies for control of Novel COVID-19 outbreak and recommendations



1) Individual Level Interventions

- Hand hygiene
- Cough etiquette including universal mask usage
- Quarantine and isolation of exposed and suspected/symptomatic cases
- Isolation of high risk individuals
- Pharmaceutical intervention
- Role of vaccine in future



Strategies for control of Novel COVID-19 outbreak and recommendations



2) Community Interventions

- Social distancing
- Test, Trace and Isolate
- Focus on hot spots and containment of same
- Social Behaviour Change Communication (SBCC)
- Protection offered by BCG, Malaria infection and other infections
- Travel restriction
- Optimal PPE for Health Care Providers
- Lock down or shut down



Strategies for control of Novel COVID-19 outbreak and recommendations



3) Overarching interventions

- Health system strengthening including capacity enhancement
for intensive care
- Enhanced Research and Development (R&D).



Recommendations



- i) Novel decentralized strategies are required to ramp up supply of both water through Municipal and Panchayat systems and soap through the Public Distribution System (PDS) and complement with novel community engagement strategies.**

- ii) This entails both ramping up the production of simple masks making it available throughout the country and wide-ranging campaign on how to prepare simple handmade masks.**

- iii) Urgent research incorporating Indian data and scenarios need to construct models for India and design effective social protection schemes to effectively cushion the shocks of the ongoing lockdown that can potentially need to be extended at least in certain states/districts.**



Recommendations



iv) These population indicate additional vulnerabilities. This social protection schemes should urgently cater to them while maintaining isolation.

v) A dynamic policy shall guide the relevance and application of the emerging evidence for public health operations.

vi) As vaccine trials and production becomes a real possibility India needs to work towards technology transfer and local production of vaccine in India.

Vaccine industry in India is technologically robust but will require suitable fiscal support and incentives.



Recommendations



- vii) Use of umbrella of 1-meter diameter can also be considered. Umbrella should be widely available at an affordable price. Possibility of umbrella distribution through Public Distribution System (PDS) should actively considered.**
- viii) Both diagnostic and serological testing require full throttle acceleration, with specific state and district policies in synchronization with the prevailing epidemiological scenario.**
- ix) Learning across states especially from those with high incidence (Kerala, Maharashtra) will enable other states to set up and modify existing systems. It is equally important to learn from States/UT (Haryana, Ladakh) relatively where there is low progression.**



Recommendations



- x) **Decentralized and socially and culturally appropriate risk communication and community preparedness plans need to be operationalized urgently for all ongoing activities.**
- xi) **India is now entering the phase where significant load of clinical cases can be expected. There is a narrow window of opportunity for institutions to stockpile PPE. The states districts may consider stockpiling using decentralized mechanisms, particularly supported by the respective State Medical Supplies Corporations and/or State Health Resource Centres.**



The Way forward



1) Immediate:

- Geo spatial distribution of case active and old at the district level should be considered for prioritizing specific public health action.
- Those who require specialist care should only be admitted in the hospital.
- Intensive care is only to be given by the well trained well protected health care provider.
- Each of the patients attending a hospital should be screened by recording temperature and any with fever should be sent to “Fever Clinic” manned by well protected staff for further clinical work out.
- To prevent Nosocomial Infection of Novel COVID-19



The Way forward



2) Short term

- **Inputs on a) Decision making set up of Govt, and others b) Managing medical countermeasures c) Travel and trade activity advisories d) Research and development of vaccines, therapeutics and diagnostics. e) Risk communication to public**
- **Health services should continue raising awareness about covid19 modes of transmission**
Approve and scale up diagnostic facilities to increase the number of people tested.
- **There is time for preparation so as to face boldly the impending crisis with sensitivity**
without extending forced curfew covering entire country putting large section of people
in distress.
- **Maintain strict surveillance of suspect cases and their contacts**



The Way forward



3) Medium term :

- Health policy maker and planners should be cautious not to be instrumental in creating a “Pandemic of Human misery” by advocating a improper Community Medicine (Public health) decision, not supported by epidemiological data and evidence based scientific reasoning.
- Strategy will need to be changed if wide spread community transmission detected without transmission foci, then hospital teams will play major role for care of sick & safe disposal of the bodies of unlucky ones.
- Engage medical/ nursing colleges in all pandemic control activities at district and state level.



The Way forward



4) Long term measures:

- A large scale expansion (5 times) of public health service & medical service should be done immediately on war footing with allocation of about 5% of GDP.
- Increase the capacity at the state and district levels to respond to the current pandemic and also similar public health emergencies in future.



The Way forward








Probably the first time in the history of mankind:


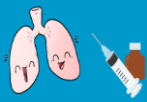











COVID-19 MYTHS vs. REALITY

Question	Answer	What is the correct way
 <p>Are Hand Dryers effective in killing the virus?</p>	NO	Frequently wash hands and/or clean hands with alcohol-based hand rub. Once cleaned dry them thoroughly by using paper towel or warm hand dryer
 <p>Can ultraviolet (UV) disinfection lamp kill the virus?</p>	NO	UV lamps should NOT be used to sterilize hands or other areas of the skin as UV radiation can cause skin irritation
 <p>How effective are thermal scanners in detecting people infected with the virus?</p>	Thermal scanners are effective in detecting fever	Thermal scanners cannot detect who are infected but are not yet sick with fever. This is because it takes 2-14 days before people who are infected become sick and develop fever
 <p>Can spraying alcohol or chlorine all over the body kill the virus?</p>	NO	Spraying such substances can be harmful to clothes or mucous membranes (i.e., eyes, mouth). Beware that both alcohol and chlorine <u>can be</u> useful to disinfect surfaces, but have to be used under appropriate recommendations
 <p>Is it safe to receive a letter or a package from China?</p>	YES	It is safe. People receiving packages from China are not at risk for contracting the virus. Previous analysis has shown that the coronaviruses do not survive long on objects, such as letters or packages

COVID-19 MYTHS vs. REALITY

Question	Answer	What is the correct way
 <p>Can pets at home spread the virus?</p>	NO	At present there is no evidence that companion animals/pets such as dogs or cats can be infected with this virus. However, it is a good idea to wash hands with soap and water after contact with pets. This protects against various common bacteria such as E. coli and Salmonella that can pass between pets and humans
 <p>Do vaccines against pneumonia protect against the novel coronavirus?</p>	NO	Vaccines against pneumonia, such as pneumococcal vaccine or Haemophilus influenza type B (Hib), do not provide protection against the new coronavirus
 <p>Can regularly rinsing your nose with saline help prevent infection with the virus?</p>	NO	There is no evidence that regular rinsing the nose with saline has protected people from infection with the new coronavirus. There is some limited evidence that rinsing the nose with saline can help people recover more quickly from common cold
 <p>Can gargling mouthwash protect from infection from this virus?</p>	NO	There is no evidence that using mouthwash will protect from infection from the new coronavirus

COVID-19 MYTHS vs. REALITY

Question	Answer	What is the correct way
 <p>Can eating garlic help prevent infection with this virus?</p>	NO	Garlic is a healthy food that may have some antimicrobial properties. However, there is no evidence from the current outbreak that eating garlic has protected people from the new coronavirus
 <p>Does putting on sesame oil block the new coronavirus from entering the body?</p>	NO	Sesame oil does not kill the new coronavirus
 <p>Does the new coronavirus affect older people, or are younger people also susceptible?</p>	People of all ages can be infected	Older people, and people with pre-existing medical conditions, such as asthma, diabetes, heart disease, appear to be more vulnerable to becoming severely sick with this virus. It is advised that people of all ages take proper precautions such as good hand and respiratory hygiene
 <p>Are antibiotics effective in preventing & treating this virus?</p>	NO	Antibiotics do not work against viruses, only bacteria. The new coronavirus is a virus, therefore, antibiotics should not be used as a means to prevention or treatment. However, if hospitalized for the 2019-nCoV, antibiotics can be used to treat bacterial co-infections
 <p>Are there any specific medicines to prevent or treat this virus?</p>	NO	To date, there is no specific medicine recommended to prevent or treat the new coronavirus. However, those infected should receive appropriate care to relieve and treat symptoms, and those with the severe form of the disease should receive optimized supportive care. Some specific treatments are under investigation, and will be tested through clinic trial

COVID-19 MYTHS vs. REALITY

Persistence of Coronaviruses on Surfaces

Material	Persistence
Plastic	5 days
Aluminum	2-8 hours
Paper	4-5 days
Surgical Gloves	8 hours
Glass	4 days
Steel	48 hours
Wood	4 days

Source: *J. Hosp. Infect.* DOI: <https://doi.org/10.1016/j.jhin.2020.01.022>
Note: Coronavirus activity may be impacted by temperatures higher than 86°F (30°C). Authors also confirm that coronavirus may be effectively wiped away by household disinfectant. COVID-19 was NOT included in this study

Medscape



Holistic Health



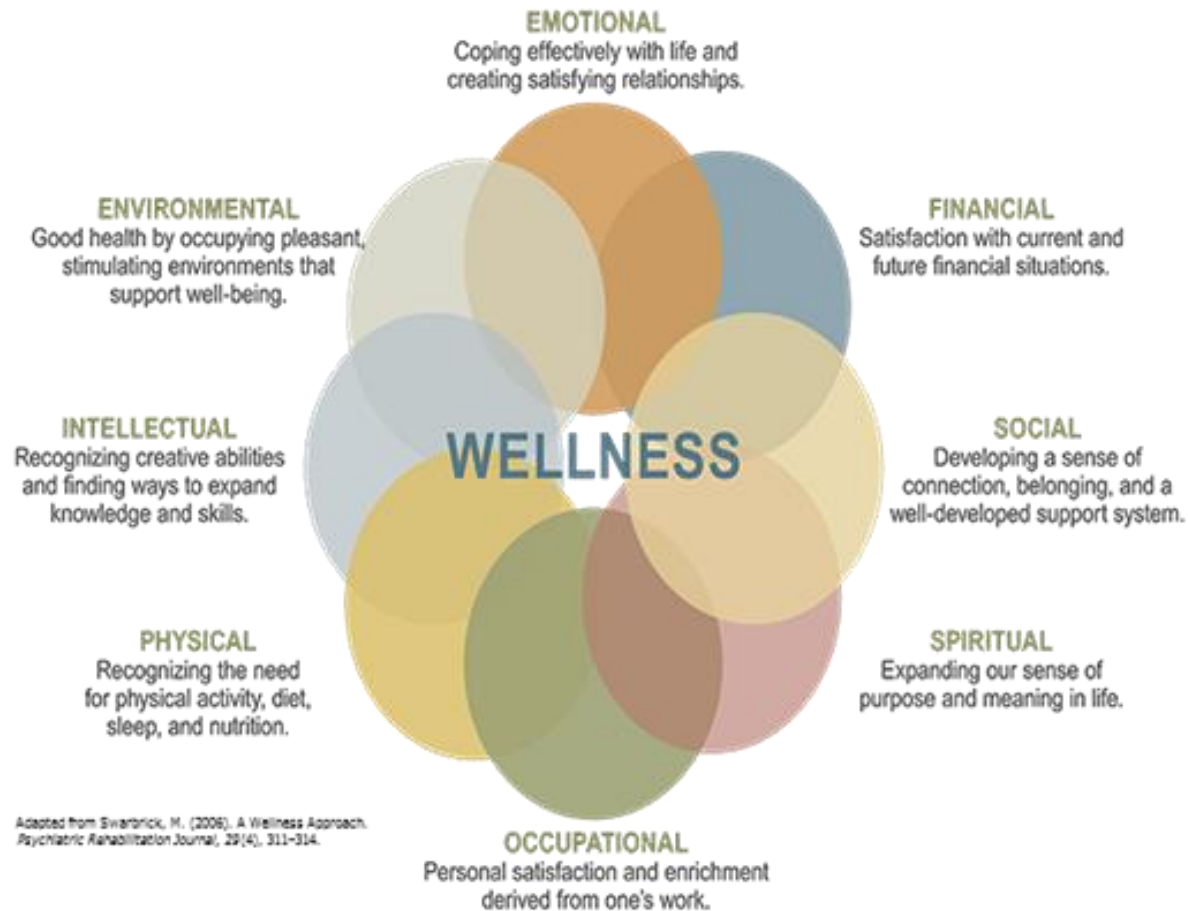
According to the World Health Organization (WHO), health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.

- Rather than focusing on specific pandemic, illness or specific parts of the body, Holistic Health is an approach to life. This ancient approach to health considers the whole person and how he or she interacts with his or her environment.
- It lays emphasises on the connection of mind, body and spirit. The goal is to achieve maximum health and well-being, where everything is functioning at the highest level possible. This, in turn, encourages people to accept responsibility for their level of wellbeing and everyday choices that affect their health.



Holistic Health

The following are the Eight important dimensions of Holistic Health.



Adapted from Swardbrick, M. (2006). A Wellness Approach. *Psychiatric Rehabilitation Journal*, 29(4), 311-314.



The Eight Dimensions of Holistic Health



1. Physical

The first and most important dimension of the Holistic Health is the physical dimension which focuses on recognising the need for physical activity, diet, sleep and nutrition.

2. Emotional

The second dimension is the emotional dimension, which is coping effectively with life and creating satisfying relationships.

3. Intellectual

Then comes the third dimension, intellectual dimension which is all about the recognising creative abilities and finding ways to expand knowledge and other important skills.

4. Social

The fourth dimension is all about social well-being by developing a sense of connection, belonging and a well-developed support system



The Eight Dimensions of Holistic Health



5. Spiritual

This fifth is the spiritual dimension which focuses on expanding our sense of purpose and meaning in life.

6. Occupational

Then comes the sixth dimension, Occupational dimension which is about personal satisfaction and enrichment derived from one's work.

7. Financial

The seventh dimension is about the satisfaction one has with the current and future financial situations.

8. Environmental

Finally, the eighth dimension is about the environment which is good health by occupying pleasant, stimulating environments that support the well-being.



Thank You