

# COVID-19 appropriate behavior in India: Time to invest for the benefits in future

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## ABSTRACT

The COVID-19 pandemic gave an opportunity to adopt many appropriate changes in the behavior of the people in India. The major gears of those behavior changes were the enforcement by the government, fear, motivation (self and induced), and self-experiences or realizations with time. If those changes are fitted in the Trans-Theoretical Model, Indian people have passed through the "Pre-Contemplation" to "Action" stage of behavior changes during different phases of this pandemic. Frequent hand hygiene, maintaining physical distancing, use of face mask, cough etiquettes, avoid greetings through physical contacts, fear in spitting and urination at public places, refrain from gatherings and avoiding outside food are some of the examples of those appropriate behaviors which were enforced or learnt during the COVID pandemic. The continuous lockdown made people understand the difference between "want" and "need," the importance of local production, and the significance of social media and technology in routine life. The work-from-home strategy gave a chance to appreciate the work-life balance in a more applied way. The first-ever lifetime experience of unbelievable rejuvenating nature because of lack of human play taught people to appreciate nature. Although the current focus is on responding to the pandemic and on coping with its immediate effects, yet this is the time when there is an urgent need to create an enabling environment to support and sustain these COVID-19 appropriate behaviors (maintenance stage) to reap the maximum benefits out of them. Sustaining these appropriate behaviors is also important considering the bimodal distribution of the COVID-19 and possibility of advent of the second wave of COVID-19 in near future.

**Keywords:** Behavior, cough etiquettes, COVID-19, hand hygiene, physical distancing

The COVID-19 crisis has brought many appropriate changes in the behavior of the people in India. To some extent, these appropriate behavioral changes are attributed to the combination of health promotional activities, motivational efforts, and enforcement/regulations by the Government of India (GoI). When the treatment for an infectious disease is not available, people try to avoid infection by changing their behavior.<sup>[1]</sup> During this pandemic, people were caught up in the fear of contracting the virus, which brought many positive changes in their behavior. Self-motivation also played a critical role in changing people's behavior in appropriate direction. Gradually people realized the importance of these changes and

appreciated their outcomes. These were the major gears of the behavior changes of people during this pandemic [Figure 1].

## Stages of Behavior Changes in India During COVID-19 As Per Trans-Theoretical Model<sup>[2]</sup>

In this initial phase of the pandemic, people were in the "Pre-Contemplation stage" of behavior. Many explanations were quoted for not intending to change the behavior like: COVID-19 won't affect India because it is a warm country, it only affects people above the age of 60 years, it infects only non-vegetarian people, etc.<sup>[3]</sup> From March onwards, the cases started increasing and people intended to start the healthy behavior in the foreseeable future but were quite ambivalent in this direction (Contemplation stage). To raise awareness and seed the behavior changes as the future preparedness

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measure, the Prime Minister (PM) of India requested to observe “*Janta Curfew*” on March 22<sup>nd</sup>, 2020. He also requested the citizens to applaud for 5 min. on the same day for health professionals and frontline workers for their relentless hard work during this pandemic. Many people took the pledge for it and observed it very nicely.<sup>[4]</sup> This was the time when Indians started to enter into the “Preparation/Determination” stage of behavior change.

A National Lockdown was declared in India on March 24<sup>th</sup>, 2020, and all 1.3 billion people were forced to stay inside their homes. This was the biggest and most severe action undertaken by any country so far. The unbending yet generous efforts of police played an important role in the strict implementation of this regulation. To show the nation’s collective resolve and solidarity, the PM requested citizens to lighten the lamps on April 5<sup>th</sup>, 2020. Millions of Indians responded to this appeal and displayed a collective spirit in the fight against COVID-19. This motivational effort gave a boost to practice the desired behavior by the people (Action phase). Subsequently, the national lockdown was extended with different regulations and relaxations.

## COVID-19 Appropriate Behaviour in India

### Hand hygiene

Though hand hygiene is the simplest, least expensive, and most important means of reducing transmission of infection, it has remained an undervalued approach. Its significance was conceptualized in the early 19<sup>th</sup> century.<sup>[5]</sup> The major illnesses that are transmitted through unwashed hands are gastrointestinal, respiratory, skin, and eye infection. It has been proved through a meta-analysis of intervention studies that hand hygiene can reduce up to 31% (19–42%) of gastrointestinal illness and up to 21% (5–34%) of respiratory illness.<sup>[6]</sup> During this pandemic, hand hygiene emerged to be an effective health promotional strategy. Adoption of this behavior can be a milestone in reducing many other respiratory and gastrointestinal infections in the future.

### Physical distancing

Maintaining physical distancing is important against contracting the respiratory infection, particularly for the prevention of community transmission or in settings where community transmission has recently been established.<sup>[7]</sup> Its effectiveness has been proved by sound scientific literature.<sup>[8]</sup> GoI enforced the implementation of physical distancing measures through various means like: marking circles in public places, installing barricades, using an umbrella, putting rope or barriers/objects, etc., In some of the hospitals, robots were being used to deliver medicine and food to COVID patients. The government has also reinforced this behavior change by making it compulsory in almost all the circulars/orders. If this behavior is sustained, it can be a panacea in the reduction of many respiratory infections.

### Face masks

Masks were conventionally recognized as part of a doctor’s dress. Both N95 mask and the triple layered surgical masks have been

found to be equally effective in controlled and hospital settings against viral particles.<sup>[9]</sup> Wearing masks and hand hygiene by the general public has been shown to decrease the proportion of various respiratory viruses during the SARS epidemic.<sup>[10]</sup> In the wake of deficiency of medical masks, the general public was recommended to use cloth masks. During this pandemic, wearing the mask by almost all the people globally will be remembered as history. Mask has the potential to prevent many respiratory infections besides COVID-19.

### Cough etiquettes

Effectiveness of cough etiquette in disrupting the transmission of respiratory infections is a proven fact.<sup>[11]</sup> Respiratory hygiene is also critical to maintaining a healthy environment. During this pandemic, GoI promoted respiratory hygiene through various IEC materials. It has also been proven that awareness is an important predictor of following respiratory hygiene.<sup>[12]</sup> So, it is required to maintain active and effective public campaigns about respiratory hygiene/cough etiquette to sustain such behavior.

### “Good Bye” to handshake

It is scientifically proven that “*Namaste*” and “Smile” are better than any other way of greetings by touch in reducing the transmission of infection.<sup>[13]</sup> In this pandemic, people are politely declining to extend their hand to greet. It gave a window of opportunity to catch up with the Indian way of greeting “*Namaste*,” a practice that has been in vogue for decades. This has stood up as a decent way of greeting even in the western world.

### No spitting at public places

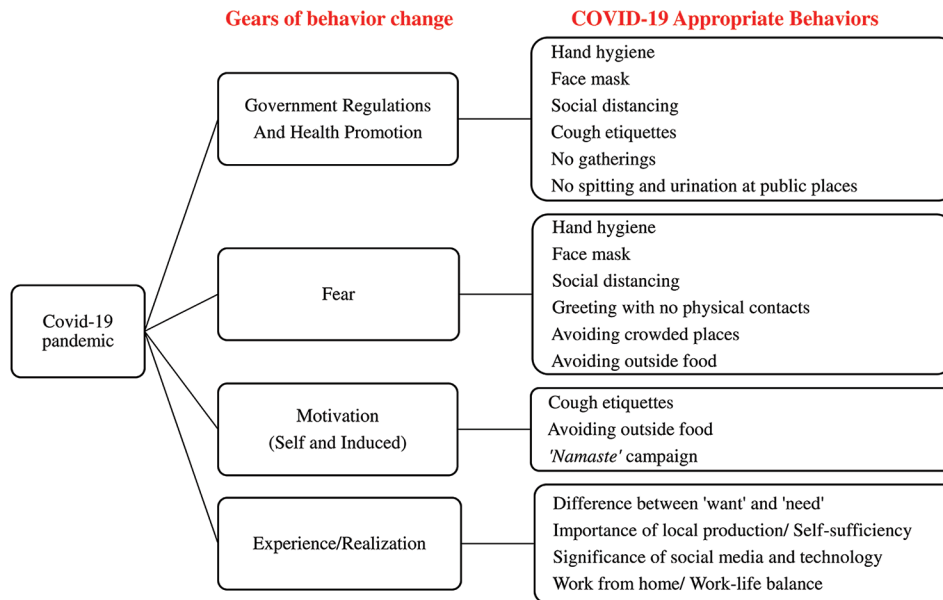
Aversion of bad practices is equally important. Union Health Ministry in India has made spitting at public places, a punishable offence under the Disaster Management Act to contain COVID-19.<sup>[14]</sup> The Ministry also requested all the states to restrict the use and spitting of smokeless tobacco in public places by people to prevent the spread of COVID-19.<sup>[15]</sup> Accordingly, many states like Delhi and Odisha legally banned spitting and urination at public places.<sup>[16,17]</sup> Enforcement laws against such unhygienic practices has potential to change the behavior of people and would not only reduce disease transmission but also improve the environment aesthetically.

### Avoiding gatherings and crowded places

GoI directed all the states in India not to allow any religious or social gatherings.<sup>[18]</sup> The health of people attending gatherings may be at risk from several unanticipated circumstances, and outbreaks of diseases are one of them.<sup>[19]</sup> So, avoiding such gatherings and crowded places is important to halt the risk of spreading infectious diseases.

### Understand the difference between “Need” and “Want”

Saving money is one of the common resolutions everyone made on the verge of the new year. This pandemic allowed people to



**Figure 1:** Important gears of COVID-19 appropriate behaviour in India

save money by avoiding unnecessary expenditures. The lockdown also taught them an important financial lesson; that buy things only when you “need” and not when you “want.”<sup>[20]</sup>

### Avoid outside food

The cultural shift had made people habitual to eat outside the home frequently, which is significantly associated with NCDs.<sup>[21]</sup> A combination of lockdown with fear of corona forced people to avoid outside food and enjoy cooking and liking towards home-cooked food. If this positive behavior change is sustained (along with physical activity), it can help in reduction in the incidence of NCDs.

### Understand the importance self-sufficiency

Local production has proved a definite survival strategy during this pandemic. Greater control over health and safety, reduction of waste, and quick turnover are some of the important benefits of local production.<sup>[22]</sup> The Prime Minister of India also highlighted the importance of local manufacturing, markets and supply chains, and requested to become “vocal for local” and help to make them global.

### Work--life balance

The lockdowns forced people to adopt the “work-from-home” strategy. Initially, people were quite uncomfortable with this, but gradually they became acclimatized. Working from home not only increases productivity but also improves the mental health of employees.<sup>[23,24]</sup> This strategy made it clear that most of the professional jobs have a certain amount of work that can be done remotely. In this way, people learnt the work--life balance in a more applied way.

### Understand the importance of social media

In the initial period of the pandemic, people were circulating information without verifying its authenticity, which created

several myths about the disease.<sup>[25]</sup> So, the cyber-crime portal of the Ministry of Home Affairs, GoI had to release an advisory with legal provisions.<sup>[26]</sup> In this line, WhatsApp and Facebook imposed additional restrictions on the frequency of message sharing. These efforts drove people to change their behavior toward the rational use of these platforms.

### Understand the importance of technology

Technology has proved as a growth factor during COVID-19. To make people aware of real-time updates and true information, GoI came out with trackers and dashboards and “*Aarogya Setu*” contact tracing app.<sup>[27]</sup> This pandemic gave a thrust to adopt the telemedicine concept, which emerged as a feasible option when the healthcare system was strained in the prevention and management of COVID-19. MoHFW in collaboration with NITI Aayog and Medical Council of India (MCI) issued telemedicine guidelines which were pending since a long time.<sup>[28]</sup> In the initial phase, both doctors and patients were not in much favor to escalate this concept. But, with time people are becoming used to these teleconsultations.

This pandemic forced the entire education system to go online. This ad-hoc change was not felt conducive for teaching and learning purposes. Gradually teachers and students became adapted to the system and quality started matching with classroom teaching. This experimentation opened up many ideas for future progressions and innovations.

### Learn to appreciate nature

The environment has been too contaminated by humans to teach them anything important about nature and biodiversity. During the *Janata Curfew*, people amused the voice of birds instead of human-generated noise. Late on, significant changes in air and water quality were observed during the lockdowns.

These unbelievable rejuvenating environmental changes were experienced first time in the living history and made people understand that mother earth can bounce back to life if humans allow for it.

## Conclusion

Hand hygiene, physical distancing, use of face mask, cough etiquettes, and avoid greetings through physical contacts are the major COVID-19 appropriate behaviors adopted during this pandemic. The major gears of those behavior changes were the enforcement by the government, fear, motivation (self and induced), and self-experiences or realizations with time. According to the “Trans-Theoretical Model,” these behaviors have progressed from the “pre-contemplation” to “action” stage. Though the current focus is on responding to the pandemic and on coping with its immediate effects, yet focusing on the lessons learnt and sustaining these appropriate changes in behavior are equally important. Because these positive change in behavior are dwindling over time because of prioritizing the restoration of societal functions rather than pro-environmental actions. Sustaining these appropriate behaviors is important considering the bimodal distribution of the COVID-19 and possibility of advent of the second wave of COVID-19 in near future. Besides general public, the role of government and policymakers is also of paramount importance to support and sustain these appropriate behaviour changes (maintenance stage) by creating an enabling environment.

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## Conflicts of interest

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