

# Go Corona Go! Cultural beliefs and social norms in India during COVID-19

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## Abstract

As of April 2020, it had been nearly 100 days since the first COVID-19 case was found in India, and a 3-week lockdown across the country was enforced to implement social distancing as a measure to contain the spread of the virus. India has combated a few epidemics in the past, from which health policy and epidemic response have been refined. However, there are likely to be religious, spiritual, and social dimensions of individual response to such measures that could put these policy efforts at risk. We outline a set of behavioral interventions taking into account potential cultural correlates specific to India. In order to mitigate the increasing spread of COVID-19 in India, policymakers can consider incorporating these elements when designing communication and prevention strategies. We argue that such interventions might ensure that behaviour change is sustained even after the formal lockdown period.

**JEL Classification:** I12; I18; D9

## Keywords

availability — heuristics — social norms — public health — cultural beliefs

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## Introduction

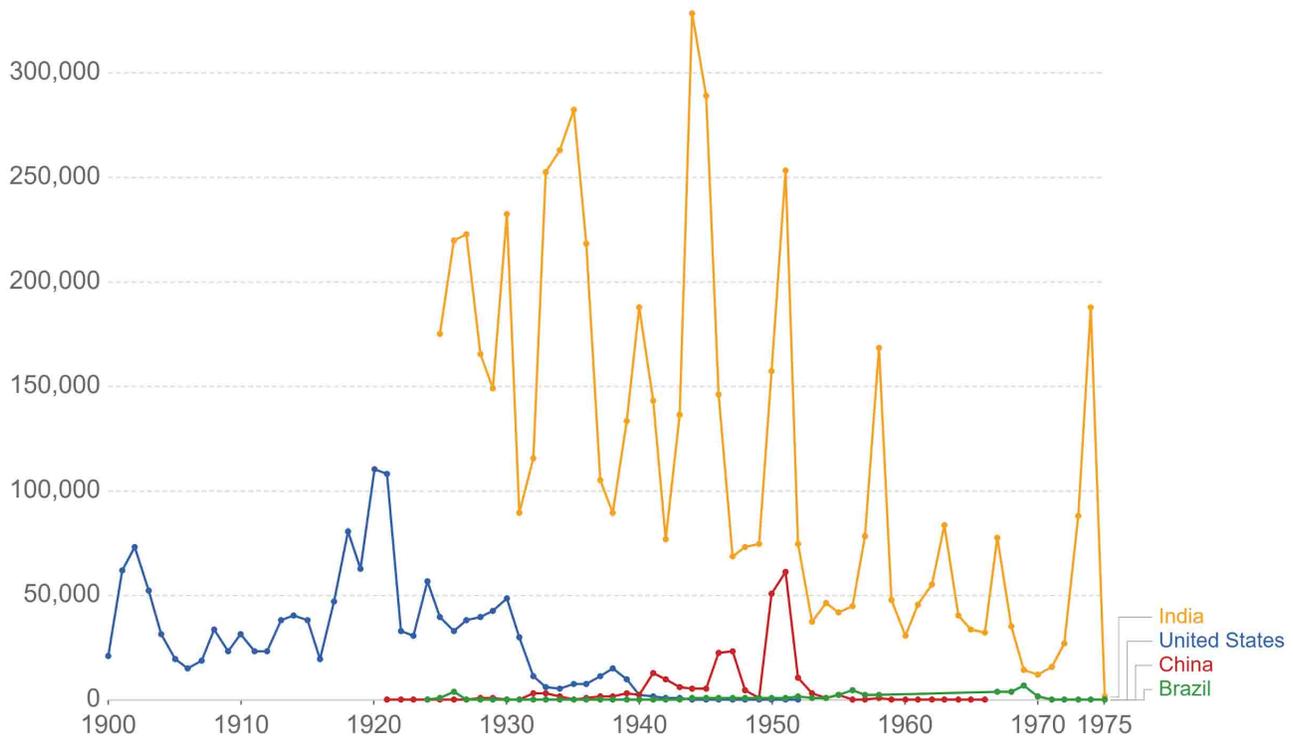
By the time this article is published, much will have changed about what we know regarding the coronavirus (COVID-19) pandemic around the world. What is not likely to have changed, however, is the importance of applying behavioral science for restricting the spread of the virus. It is no coincidence then that containing the spread of a deadly infectious disease was the focus of earliest experiments on framing in behavioral economics (Tversky & Kahneman, 1981). A binary choice task showed how altering the way outcomes of a disease control measure are framed (in terms of lives saved or lives lost) can change which option is preferred. Thus, it is likely that government reactions to viral outbreaks are associated with how they frame the problem, as much as their risk aversion. On the other hand, how humans react to the spread of the virus is important for whether or not governments and international bodies such as the World Health Organization (WHO) are able to tackle its effects. For example, maintaining physical and social distance from potentially infected individuals is one of the major ways in which the spread of the disease can be curbed. There is a rich line of work in psychology and behavioral economics that has repeatedly suggested that humans use frugal decision rules to make choices (Gigerenzer et al., 2011; Kahneman & Tversky, 2000). Thus, the human response to COVID-19 is likely to be driven by applications of such heuristics, and these will determine how (and when) it is overcome.

We already know from past evidence in psychology and economics that culture and environment play a significant role in how such behavior change can be sustained. For example, culturally-informed beliefs about purity could be formed via heuristics – specifically in this case, the availability heuristic via which people make judgements on the basis of availability of information about alternate outcomes (Tversky & Kahneman, 1973). For instance, bringing to mind words starting with the letter K seems to be much easier than thinking of words with K as the third letter, even though there are much more of the latter than the former; words beginning with K are simply more *available* to recall. In this context, alluding to a culturally relevant metaphor to invoke social distancing might be especially effective. This is particularly the case in India where we know that human behaviour intersects with considerations of diverse cultural beliefs, ethnic fragmentation, and social norms (Tagat, 2019).

India is no stranger to having to deal with the outbreak of a deadly disease. In 1896, the city administration of Bombay (now Mumbai) had to manage cases of the bubonic plague (Sarkar, 2001). This led to the enactment of the Epidemic Diseases Act, 1897, which has now been invoked in response to COVID-19. Even then, many resisted segregation and treated hospitals as highly impure – in fact, perceptions of purity and pollution are integral to private and social behaviour in India (Tagat & Kapoor, 2018). Following this, in 1918, nearly 13 million lives were claimed by the influenza pandemic that struck India brought by British troops arriving by

## Number of reported smallpox cases, 1900 to 1975

This includes endemic and imported cases, therefore some countries still recorded some cases after the official year of eradication.



Source: World Health Organization (1969-1988)

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**Figure 1.** Smallpox cases in US, China, Brazil, and India (ourworldindata.org, 2020a).

sea. Given that this occurred at the end of the first world war, Mills (1986) argues that the crowding of middle-aged persons and youth might have exacerbated its spread. Johnson and Mueller (2002) find that the death rate for India was 6.1%, compared to 6.5% in the United States of America, and 4.8% on average in Europe. Throughout the period following India's independence from British rule in 1947, smallpox was another virus that affected a large fraction of the population (Banthia & Dyson, 1999). However, Smallpox was eradicated following consolidated government efforts in the 1970s (Bhattacharya & Dasgupta, 2009). Figure 1 contains the number of reported smallpox cases across countries up to 1977, when it was declared eradicated.

Among the most recent Indian epidemics that have been the subject of much academic work is the 1994 bubonic plague that broke out in the city of Surat, situated in the western state of Gujarat. This outbreak is similar to the current coronavirus pandemic in terms of how we have responded and reacted; there was widespread panic and out-migration even then. Rubin and Dickmann (2010) stated that the behavioral responses were characterized by “panic buying” of medications, as well as reliance on alternative forms of treatment such as home-

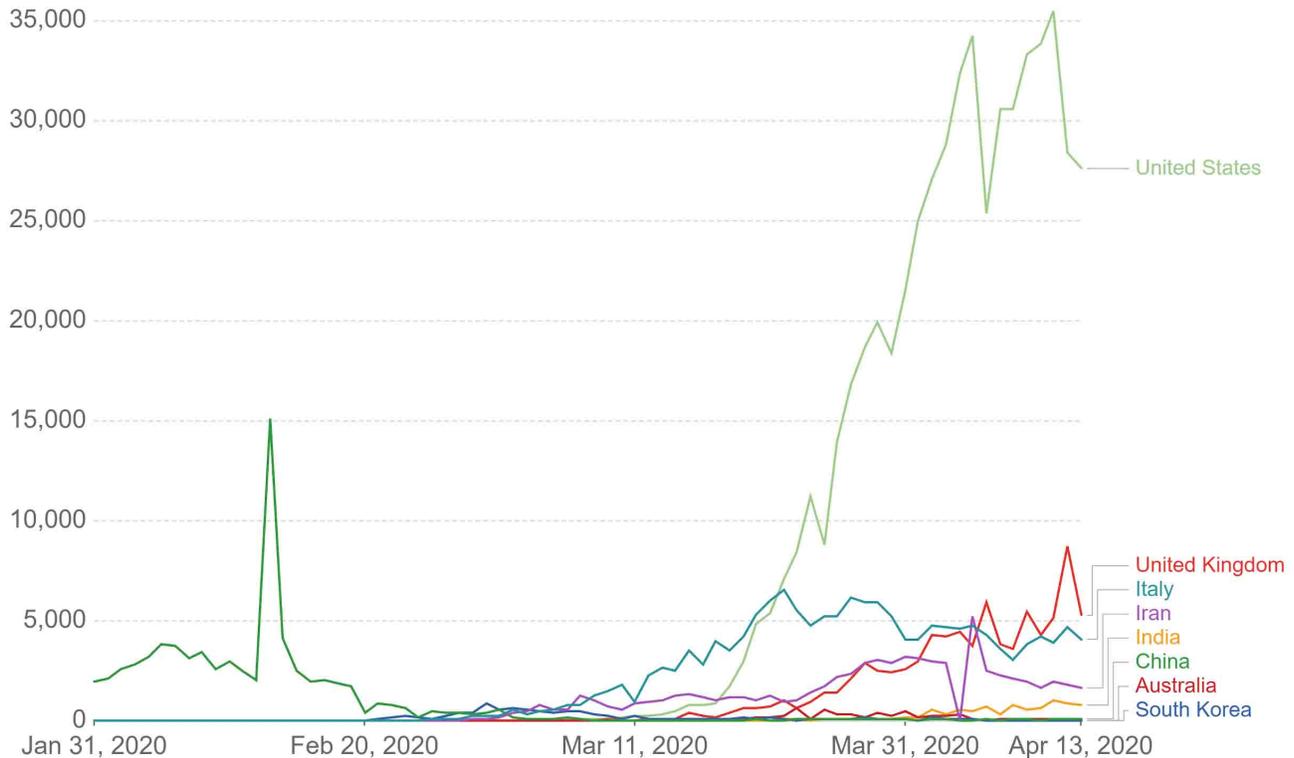
opathy. This was compounded by misinformation or lack of complete information from the government (Ramalingaswami, 2001), additional travel checks, and in general, a lack of a coordinated response to the issue (Pallippambal, 2005). While there is no direct evidence suggesting that a lack of social distancing caused a wider outbreak of these epidemics in India, high population density (particularly in urban centers) might have exacerbated the spread (Chandra et al., 2013). More recent virulent outbreaks have been largely contained to specific states (such as Rajasthan and Kerala; see Srivastava & Kachhwaha, 2019) and, perhaps on account of better infection prevention strategies (Chatterjee, 2018), have not resulted in as much national-level panic as COVID-19.

Thus, government response to the spread of a virus is crucially important for guiding its citizens through uncertainty about life, livelihood, and the future. In designing interventions and response plans, however, the state must take into account existing attitudes and perceptions toward healthy behavior. In a country as socially, ethnically, and religiously diverse as India, a one-size-fits-all *behavioral* intervention is not likely to yield results (and in some cases might even encourage violations). Even at the time of a global pandemic

## Daily new confirmed COVID-19 cases

The number of confirmed cases is lower than the number of total cases. The main reason for this is limited testing.

Our World  
in Data



Source: European CDC – Situation Update Worldwide – Last updated 13th April, 11:30 (London time) OurWorldInData.org/coronavirus • CC BY

**Figure 2.** Daily new COVID-19 cases globally and in India (ourworldindata.org, 2020b). *Note:* These data do not account for the number of tests conducted per thousand persons, which vary widely by country. For example, India has a testing rate of 0.13 per 1000, while the US has a testing rate of 8 per 1000 and Italy has a testing rate of 16.3 per 1000 persons.

and complete lockdown, there is an opportunity to intervene in targeted, measured, and specific ways to nudge individuals toward healthy and safe behaviour that could potentially save millions of lives. This paper seeks to examine the social, cultural, and behavioral aspects of health-related behaviour in India and propose interventions that account for these.

### India's response to COVID-19

India, with all its diversity and multitudes of cultures, is unique, implying that its response to combating COVID-19 is unique as well. Ranging from chants of “Go Corona Go!” (aimed at driving it away, and *not* as a cheer) to unscientific beliefs about drinking cow urine to kill it, a good proportion of messaging around COVID-19 in India is intricately tied to cultural beliefs, which are often reinforced via daily rituals. However, notifications from all official channels of communication make it explicit that people should shun such superstitions, rumors, and pseudoscience, maintaining WHO guidelines on handwashing and social distancing as the key source of information. Data from the World Bank estimates

that only about 60% of Indians have access to basic handwashing facilities and soap (World Bank, 2017); similarly, social distancing remains a challenge. For example, the city of Mumbai alone has the population of Australia (nearly 25 million people) but is contained in 0.05% of the area, and so sustaining social distancing will be a tougher challenge in Mumbai given its larger demographic and physical constraints.

Coronavirus was first diagnosed in a patient in India at the end of January 2020, and government statistics suggested that nearly 1.5 million individuals undertook air travel within India till March 22nd, when many airports closed for operations and all international flights to India were halted. Figure 2 compares the “flattening of the curve” in terms of daily COVID-19 cases in India and around the world. Note that these data draw on the European Center for Disease Prevention and Control and may differ from national estimates. Thus, the government's initial response was a combination of staggered travel restrictions, reduced operations, cancelled public events, and thermal screenings at airports, culminating first into a *Janta* curfew (literally, people's curfew) on 22 March 2020. As of

April 2020, India is on the verge of Stage 3 of coronavirus transmission, meaning community spread is not yet fully reported. Interventions by the government have thus far focused on a mix of self-quarantine measures for low-risk individuals, full quarantine for high-risk patients, and are likely to evolve as and when community spread is first observed.

In his address a few days before the self-imposed curfew, Prime Minister Narendra Modi urged citizens to stay in their homes for the entire day, barring medical workers and other essential service providers. He also encouraged citizens to stand at their windows or doorways and applaud the efforts of professionals in such services. This can be seen as a means of enhancing salience and availability of the idea that healthcare workers on the frontlines rely on everyone else staying at home to effectively tackle the crisis. Furthermore, activating the affect heuristic by displaying gratitude in this manner might have enhanced participation (e.g., Slovic et al., 2002). At 5PM, synchronously, Indians all over the country clapped, rang bells, and made an audible din showing their appreciation (although no data exist on precisely how many people engaged in this activity). Behaviorally, this was a powerful signal to neighbors and the community regarding adherence to a prescriptive norm: you're *supposed to* express thanks in this way, and it will be obvious if you choose not to. At the same time, reports suggested that many broke social distancing protocols while engaging in this activity, congregating on the streets to applaud health care workers. Those who recorded and shared the moment on social media engaged in virtue signaling, making their commitment known to friends and family and building reputation (e.g., Crockett, 2017).

Following this, the entire country went into a 21-day lockdown beginning 24 March 2020, halting the movement of over a billion people; the lockdown has since been extended to May 3. Only essential services like grocery stores, banks, and hospitals remained open, with transportation and commerce coming to a standstill. Such a lockdown has been reported to have affected India's poor and migrant class far more disproportionately than others (Chandrashekhar, 2020). The Indian Prime Minister, in another speech a few hours before the lockdown began, appealed to citizens to abide by the restrictions on movement and activities, using the analogy of the *Lakshmana rekha*. This is a reference to the protective line Lakshmana drew around Sita's house to prevent harm from befalling her in the ancient Indian epic *Ramayana*. In Indian parlance, *Lakshmana rekha* has come to represent a strict rule that should not be broken (Begum & Barn, 2019), invoking normative behavior with an easily available and salient cultural reference.

Besides these overarching instructions, social distancing is being implemented in several regions through the use of circles and squares drawn on the ground while queuing up to buy essential goods, invoking a visual cue of sorts (Figure 3). In addition to measures like these, police officers in some Indian states are punishing those who break the lockdown, either by physically assaulting them or publicly shaming them

(Heijmans et al., 2020). This is often because a large fraction of the economically and socially mobile class in India are young (nearly 54% are under the age of 25, Census, 2012), and typically, male. Of course, maintaining social distance among otherwise socially vibrant groups may be challenging when the prevailing social norm encourages rule violation despite the threat of sanction and public harm (Bicchieri, 2006).



**Figure 3.** Individuals follow social distancing using pre-marked circles in New Delhi (Nazir, 2020).

Another inventive example was traffic police in some cities wearing “corona helmets” designed to raise awareness among commuters (Figure 4). Research has shown that attention is captured by novel stimuli (Johnston et al., 1990) and that we have stronger and quicker responses to threatening than non-threatening stimuli (March et al., 2017). The spiky helmets used to represent the coronavirus inadvertently drew on these principles of attention and evolved preferences, making for an effective message.



**Figure 4.** A police officer uses the “Corona helmet” to warn a motorist to stay indoors (P. Ravikumar, 2020).

## Policy recommendations

The case for India to become the next hotspot for the virus is only mounting (Mandal et al., 2020). Hence, we turn to

behavioral science<sup>1</sup> to clarify how to properly implement social distancing, draw on normative and cultural references to keep people at home, and suggest social sanctions that can be adopted in rural<sup>2</sup> and urban India. Such measures, coupled with continued social distancing and tracking, testing, and isolation of cases may be critical for ensuring that India's COVID-19 challenge is overcome safely. These interventions are proposed keeping in mind our assessment of context in Section 2. Thus, making use of the availability heuristic in the choice of intervention frames is important for a social distancing policy to be effective in India. Below, we outline in detail five policy insights that are specific to implementing behavioral interventions in India.

First, drawing on the *Lakshmana rekha* principle and its use consistent with the availability heuristic, we recommend drawing a line outside the home near the doorway with *rangoli* (colored powder) or chalk to provide a visual nudge to prevent crossing the line, quite literally. Evidence suggests that purity and norm violation related to religious and spiritual beliefs are important in framing behavioral interventions (Coffey et al., 2017). As described earlier, creating a visual, tangible intervention while making a prominent cultural reference in India could prime individuals to remain indoors. This might also help in accentuating the emotional connection associated with participating in the intervention (Ly et al., 2013). Akin to Eve eating the forbidden fruit, the line is meant to protect those at home, which is a fitting analogy to the “stay at home” message to prevent the spread of the virus.

Messaging around physical manifestations of appropriate distancing may be crucial in driving the point home. To help people estimate a reasonable length for maintaining social distance, we propose that COVID-19-related policy communication in India can use a more easily recalled example. For instance, a cricket bat (approximately 3 ft in length), is very common in Indian households. Asking people to “Stay about two cricket bats apart” can become relatable and effective messaging, given the popularity of the sport in India, as well as the accessibility of this object to memory. Where cricket bats are unavailable, policy can use the analogy of a broom of similar length. Similar messaging has been used in Canada in an attempt to help the public keep safe distance from each other (Nickel & Martell, 2020).

Third, clanging vessels to show appreciation may be repurposed to draw attention to rule violators or those who break quarantine, particularly in rural areas. Data on negative reciprocity from the Global Preferences Survey (Falk et al., 2018) shows that Indians are more likely to punish bad behaviours than those from western, educated, industrialized, rich, and democratic (WEIRD) countries. Combating the coronavirus

is a collective action and coordination problem; therefore, citizen participation can be used to assist the local authorities to enforce prescribed behavior. Specifically, by adhering to the shared “stay at home” norm, individuals can signal socially beneficial and cooperative behavior (Ostrom, 2014). In theory, this may be applicable to urban areas with housing societies as well, although it is more likely to backfire and stigmatize those who may have genuine cause for leaving their homes. Currently, those with access to social media are resorting to clicking pictures of those breaking quarantine and alerting the local police regarding this behavior in a very public manner. In rural areas, social networks are often stronger and there is familiarity between rule violators and whistleblowers, so drawing attention to the act may not be as difficult.

Fourth, starting a social media initiative (#SocialDistance-Selfie) where citizens are encouraged to post a screenshot of them video-chatting with friends and family by maintaining social connectivity despite physical distancing may call upon norms too. This draws inspiration from an earlier viral trend in India called #SelfiewithDaughter, which was implemented in June 2015, associated with the *Beti Bachao, Beti Padhao Yojana* (Save and educate your daughter program). While this campaign was highly politicized as it dealt with gender issues in a highly paternalistic culture, having a social distance selfie competition can become a novel way to virtue signal for those who feel it important to showcase their compliance.

Finally, a discussion on implementing behavioral interventions and nudges is incomplete without understanding the context for policymakers (Tagat & Kapoor, 2020). For example, implementing social distancing in a dense, diverse, and large metropolitan area such as Mumbai may face different challenges from that of a similar policy in, say, cities in Jammu & Kashmir (the northernmost state afflicted by political conflict). Similarly, different governance structures may be associated with variations in implementation capacity at the state or local level. As the perceived threat level of COVID-19 may not be communicated effectively (and simultaneously) to all levels of stakeholders, it is likely that policymakers may not just be racing against time but also against lack of adequate information on designing responses.

## Conclusion

COVID-19 has dramatically affected the way we function and interact with others. Past indications of India's response to the spread of deadly epidemics bring to the fore the role of spiritual, religious, and social context (Bhattacharya, 2006). Even with efforts to eradicate smallpox, there was significant misinformation (e.g., that the prophylactic was made from cows). Similarly, when tackling the spread of the plague from Surat in 1994, there was widespread panic that led to ostracization in the community. These are all indications that India has faced several behavioral challenges that could undermine a measured and targeted approach to preventing the spread of COVID-19.

Whether it be through state-sanctioned or self-imposed

<sup>1</sup>A review on behavioural interventions regarding handwashing, face touching, and other actions relevant to reducing the spread of COVID-19 can be found in Lunn et al. (2020).

<sup>2</sup>There is no clear understanding of the spread (and therefore the threat) of COVID-19 in rural India. Many migrant workers that returned to their homes in rural areas might be putting a section of India that has already insufficient healthcare systems at further risk (Chotiner, 2020).

changes, monitoring individual behaviors is more important than ever to contain the spread of the virus. By incorporating cultural and traditional beliefs and the availability heuristic into behavioral interventions, we offer a few implementable suggestions that may assist in helping Indians stay at home, keep adequate physical distance when venturing outside, while also maintaining ample social connectivity during this crisis.

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