Tossing the word “Social Distancing” to “Human Distancing” for the Betterment of Human Species in Present Pandemic Situation of COVID-19 in India

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ABSTRACT
People are facing an extraordinary and challenging situation due to Corona virus (COVID 19), that has been impacting the life of the people in a big way, subjecting them to unimaginable miseries. The world is under lockdown; moreover peoples are also under lockdown situation. Everyone is advised to maintain social distancing to prevent further spreading of the corona virus. Death toll in the world as on today (24th April, 20) is 1,80,784 and in India 652 (www.worldometer.com). Question is that whether “Social Distancing or “Human Distancing with greater social bonding” should be an accepted principle to combat the disaster?

Keywords: COVID-19, Pandemic, Social distancing, Human distancing, Social bonding, Disaster, Hazards.

INTRODUCTION
What do we mean by “Social Distancing?”
Social distance describes the distance between different groups of the society such as social class, race/ethnicity, and gender/sexuality. The word “social distancing” is not new in India. It was first surfaced in the soil of India around Vedic period (1500-1000 BCE) through Varna/Castism in Hindu religion (Jamison et al., 2014). ‘Varna’ defines the hereditary roots of a newborn; it indicates the colour, type, order or class of people. Society was made divided into four Varnas/castes that time which were – Brahmns (priests, gurus, etc.), Kshatriyas (warriors, kings, administrators, etc.), Vaishyas (agriculturalists, traders, etc.) and Shudras (labourers) on the basis of their quality, ability and intelligence. In fact, Varna’s represent the life style of human beings. Unfortunately, afterwards division was forcibly made on the basis of the family they belong.

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Sons of Brahmans became Brahmans and Shudras became Shudras and in this process, Shudras became untouchable community and other than Shudras, people started maintaining a “social distancing” with them (Sharma, 1958). They were not attended by doctors at the time of their health hazards. This was the history of the word “social distancing” in India. This is not only the case in ancient India; it is sill prevailing in Indian society in different forms (Bayly, 2001). In some countries it is in the form of “white vs black”, somewhere it is “religion vs religion”. “Social distancing” on the basis of financial power also exist from the ancient period and is prevailing still now (Bayly, 2001). Dr. B R Ambedkar, eminent scholar and academician who formulated Indian Constitution, had felt so suffocating within the Hindu religion (Monusanhita) on question of social distancing that he left Hindu religion and became a Buddhist in the year of 1956 (14th October) (Kumar et al., 2019).

The social distancing scheme is a “non-pharmaceutical infection prevention and control intervention” implemented to mitigate the community transmission in India, according to the Ministry of Health and Family Welfare (https://www.mohfw.gov.in/pdf/SocialDistancingAdvisorybyMOHFW.pdf).

Epidemics and restrictions of movement go hand in hand, as the Bombay Plague of 1896, fuelled restrictions on Indian ships in the Persian Gulf. As a consequence, new law known as “Epidemic Disease Act, 1897” was enacted to tackle bubonic plague in Bombay in former British India (https://anchor.fm/economics-of-coronavirus/episodes/The-Bombay-Plague-Epidemic-of-1896-and-Modern-Indian-Politics-with-Shruti-Kapila-ecr022?fbclid=IwAR1TsJZNIWdPPFf21RqL6uJ8_aHZpBOFHxznZmc2JZCm7sqgXisTC_pplQ). These events sound eerily familiar as the playbook for pandemic response is the same today as in 1896.

**Reason of “Social Distancing” due to COVID-19 spreading**

“Epidemic Disease Act”, the act of 1897 was enforced now to mitigate the disaster due to spreading of COVID-19. For COVID-19 the incubation period can vary from other SARS (1-4days) (Lessler et al., 2009), ranging from 3-7 days up to maximum of 14 days (Zhu et al., 2020). During this time, patients are contagious and can transmit the virus to others on an average of 3.77 (Yang et al., 2020). Accordingly to many research this virus can spread mainly from person-to-person who are in close contact with one another (within 3 feet). The main source of infection is the respiratory droplets produced when an infected person coughs or sneezes. These droplets (around 3000 droplets in one cough) can land in the mouths or noses of people who are nearby or possibly can be inhaled directly into the lungs (https://www.who.int/news-room/q-a-detail/q-a-coronaviruses) (Fig 1). Thus different countries have emphasized on quarantine mode during the incubation period as the most effective measure to limit virus spread.

![Fig. 1: Cartoon representation of Corona virus spreading from a single person to population.](image-url)
Measure taken in the name of social distancing

Seven major measures were taken to combat the disaster:

- Imposition of lockdown (24th March 2020-3rd May 2020) throughout India.
- Imposition of quarantine in house, government centres and hospitals.
- Opening of testing centre with testing kit.
- Availability of PPE for all medical personnel.
- People asked not to go out of their house other than extreme emergency.
- All educational institutions are declared closed.
- Restrictions on all types of gathering.

Scenario of today’s “Social Distancing” in India

Indian families are known for multi-generational households. Congested houses are ripe conditions for the virus spread as younger members live with older denizens who are more susceptible to the virus. Social distancing has revealed the interface between urban planning, social inequity and public health. The average room per person in Indian household is just 0.4; compared to 2.4 person per room in the United States ([http://governbetter.co/indias-social-distancing-conundrum-0-4-room-person-versus-2-4-in-us-the-most-affected-country/](http://governbetter.co/indias-social-distancing-conundrum-0-4-room-person-versus-2-4-in-us-the-most-affected-country/)).

The distribution of households by size and number of rooms during the year 2001 and 2011 shows that majority of households dwell in one room i.e 35.11% of households lived in one room house in 2001, though this decreased to 32.13% in 2011. The percentage of households not having any separates space or those that dwell in non-exclusive rooms was 2.32% in 2001 and it has increased to 3.08% in 2011. ([http://mohua.gov.in/pdf/5c80e2225a124Handbook%20of%20Urban%20Statistics%202019.pdf](http://mohua.gov.in/pdf/5c80e2225a124Handbook%20of%20Urban%20Statistics%202019.pdf))

The World Health Organization (WHO) has released a set of recommendations for practicing quarantine ([https://www.who.int/publications-detail/considerations-for-quarantine-of-individuals-in-the-context-of-containment-for-coronavirus-disease-(covid-19)](https://www.who.int/publications-detail/considerations-for-quarantine-of-individuals-in-the-context-of-containment-for-coronavirus-disease-(covid-19))). For home quarantine, it recommends that the person should occupy a well-ventilated single room, or if a single room is not available, maintain a distance of at least 1 metre from other household members, minimize the use of shared spaces and cutlery, and ensure that shared spaces (such as the kitchen and bathroom) are well ventilated ([https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public](https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public)).

The wealthier the household is, the more space an individual has for the possibility of home quarantine. Access to space is tied to the financialization of real estate in the neoliberal era. Income inequality, castes and skin colours is spatially mapped and embedded in the cities we live in. The denser a community, like the slums in Govandi in Mumbai makes the spread of the virus easier as social distancing is a luxury or fancy fantasy (Fig 2A).

Economically vulnerable communities of practices as gig economy workers to small traders need to step out to make a living, and the ‘Work from Home’ alternative is unavailable to them. Migrant workers walking hundreds of kilometres to reach their home destinations in the light of a lockdown or sleeping under a flyover as work has not dried up nor do they have a shelter, makes social distancing as claimed by the authority very unrealistic (Fig 2B,C).
Fig 2: Snapshots of different scenario of Social Distancing in India after lockdown announced. 
(A) Slum area in Mumbai (B) & (C) Migrant workers started their journey towards home after their job lost. (Source: [https://www.bbc.com/news/world-asia-india-52360757](https://www.bbc.com/news/world-asia-india-52360757))

Outcome of “Social Distancing”
- Social gathering (including religious) could not being stopped
- Everyone/ communities becomes suspicious to others/ communities
- Relatives of patients becomes scared to come forward to help them
- Cremation becomes a matter of concern to the Government
- Life saving drugs are not easily available throughout the country
- Non availability of the test kits in many small villages in different states.
- Daily wage earners are facing tremendous difficulties as they have lost their jobs
- Most of the time Ambulance drivers are not available to carry corona patients in many places in India
- Labourers working in different state are almost in hunger condition. Neither they can come out for food nor can they come back to home.
- Transport workers stranded at different places on the highways are almost in hunger for want of ration/cooked food.

Now the question is whether the term social distancing is proper or not? Without involving the society/community, no disaster could be mitigated in the world. We know that community is first to suffer and real time responder as well. Mutual help is the best help to minimize any disaster. Community can identify vulnerable and affected groups easily. Infact, UNDP (United Nations Development Program) measures magnitude of disaster through an equation

$$D = \frac{H\times V}{C}$$

Where D: Disaster, H: Hazard, V: Vulnerability, C: Capacity of community

So, it can be seen disaster (D) can be high or low in magnitude according to community’s capacity (C) is low or high while H, V are same. Government has thought of mitigating disaster due to COVID-19 through social distancing without involving the community, in fact social distancing isolates the community.

An alternate of “Social Distancing”
Let us have a look on the slokas 32 and 33 of ‘Sushrut Sanghita’(500 BCE) written by
ancient ayurvedic surgeon doctor Sushrut (Bhishagratna, 1916) where he mentioned that coughs, breathing problem, vomiting, running nose and etc can spread through touching, using same towels, sharing same beds (Shukla, 2012). He talked about the “Human Distancing” in place of “social distancing” and if required ‘house quarantine’ is needed to mitigate the disaster. 150 yrs back by Ishwar Chandra Vidyasagar, suggested the community involvement with human distancing to fight against epidemic due to small pox (Fenner, 1988) or cholera (Macpherson, 1872) or malaria or other communicable diseases.  

Question is that how to diminish the disaster due to COVID-19 through “Human distancing” with better social bonding. Suggestions are as follows:

- Test centres and test materials has to be increased
- Home quarantine is meaningless in bastis or villages due to small accommodation
- Quarantine centres to be opened in good numbers in both towns and villages. Schools or colleges can be utilized for this purpose.
- Trained volunteers should be deployed in the centres and if required civil defence volunteers maybe utilized.
- Centres should be made habitable so that suspected persons don’t feel it as jail
- Local NGOs may be requested to look after the centres. Only police and govt staffs cannot serve the purpose.
- All service providers should be brought under insurance scheme and they should be provided with proper dress code and medical utilities
- Village cultivation to be allowed under the supervision of Panchayat
- Vegetable markets should be opened under the supervision of Panchayat/Municipality
- Helpline centres should have to be more functional
- Maintaining “Human distancing with social bonding” Kerela has cited very good example by involving political party workers, NGOs, govt workers they provide food and shelter for labours from other state.
- “Human distancing with social bonding” will make feel the people (affected and nonaffected) as the warriors against corona virus (COVID 19) war.

CONCLUSION
A pandemic is a black swan event and extraordinary measures are taken which has led to unreasonable and difficult tradeoffs between lives and livelihoods. Social distancing must think through an Indian lend grounded in our material reality. Social distancing in the Indian context is juxtaposed with our cultural realities such as castism and communalism. Untouchability may make a comeback, cloaked under a biomedical excuse. COVID-19 viruses are spread through human contact, and in order to arrest its spread, distancing from human to human is mandated. Hence, we propose “Human distancing with social bonding” should be the main concept/philosophy to reduce any Pandemic but not the ‘social distancing’.

Declaration of Competing Interest
The authors declare no conflict of interest. We confirm that the manuscript has been read and approved by all named authors.

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