



Fighting and Chasing the Rogue Virus-Covid19

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ABSTRACT

The novel coronavirus of 2019, COVID-19, also known as severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), has spread from its origin Wuhan, China to the rest of the world. It is important to note that while the number of new cases has reduced in China lately, they have increased exponentially in other countries including South Korea, Italy and Iran. In India, the COVID-19 trajectory appears assured to change modes. While the number of incidents grew slowly in February, they doubled in just five days in mid-March from 100 to more than 236, and now at the end of April, the cases reported are 29,435. These numbers are possibly an underestimate of the infected and dead due to limitations of surveillance and testing. The Indian government declared a countrywide shutdown for a period of 3 weeks from 24th of March to help prevent the spread of the virus. Most of the affected people had connection with flyers from covid-19 affected countries; some of them had no such interaction, indicating that community transmission could have started in several parts of India. Thus, an important collective goal is to reduce the outbreak and to flatten the peak of the outbreak curve. Cooperation is a crucial tool in the COVID-19 battle. There is a need to identify and find a way around the particular threats, the overarching cultural and social patterns in our area. This article discusses the tactics that should build for handling the crisis.



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INTRODUCTION

Who would have ever thought that the 21st century, having the best of medical advances and the health care infrastructure, will witness the unprecedented pandemic of the novel coronavirus, COVID-19, which is undermining humankind worldwide (Sarin, 2020). Every day we are provided

with rising figures and around 3.04 million confirmed cases of COVID-19 were recorded by the global watch at the time of this writing. On a brighter note, 8,94,000 recovered completely and on a negative side 2,11,000 lost precious lives (WHO, 2020).

In December 2019 a novel coronavirus (SARS-CoV-2) has been first discovered and recorded in Hubei province in China. Sadly, social distancing steps not being in effect in China until it was too late resulted in hospitals to be filled and accelerated spread was witnessed, culminating in a sharp increase in new infections (Gudi and Tiwari, 2020). India's COVID-19 situation is decently improved than other countries already affected, thanks to the precautionary steps. India, however, has not escaped the pandemic, where it still comes into a place of risk.

The worse things about any epidemic are the transmission of viruses from mild or asymptomatic populations, which has been seen in the case of the SARS-CoV-2 infection (Krishnakumar and Rana, 2020). If

this pattern persists then the virus will build itself into the community and quarantine would be difficult to prevent the spread of the virus. A brief overview of the corona virus including the host, symptoms, mode of transmission has been mentioned in Table 1. The government has taken certain measures to curb the spread but people don't perceive the situation effectively. Government officials in all countries continue their efforts and strategies to reduce human-human contact by encouraging country-wide shutdowns of public spaces as well as numerous measures to ensure people's safety are being taken such as social distancing and self-isolation, which restrict the social relationships. This would minimize the possibility of COVID -19 spread to humans by fracturing the transmission chain and the addition of new COVID -19 cases (Vellingiri *et al.*, 2020).

In India, it has been noticed that so many people are not serious about the life-threatening calamity of COVID-19 (Krishnakumar and Rana, 2020). Practising habits such as self-isolation, social distance, and exposure to health services only when symptoms are extreme may be insufficient due to inadequate awareness and illiteracy in developing countries. The dispersal of disinformation and false beliefs among the people through social media is also one of the cause of this lacuna (Arora *et al.*, 2020). Therefore, it is need of the hour to act urgently and need to act now to reduce the loss from this epidemic, dissemination and transmission.

DISCUSSION

According to an article released by the COV-IND-19 Research Group, it has been calculated that India could see between about 100000 and 1-3 million confirmed COVID-19 cases by mid-May if the virus keeps spreading at its current pace. Therefore plans to combat this pandemic need to be built (Pulla, 2020)

Eliminating the “infodemic”

As COVID-19 continues to spread, so are the facts — and myths — around it (Wiederhold, 2020). It is of paramount significance to empower people with the right facts because misinformation and incorrect assumptions begin to circulate contributing to another “infodemic- a social media pandemic”. Social networking has proved to be a powerful platform for transmitting all the outbreak alerts, and careful screening must be performed to transfer accurate information.

Boosting the confidence

The everyday surge in cases has led to a menace in

the country's population. Isolation has already been established in the country, resulting in patients with reported or suspected with COVID-19 feeling dread of the effects of their illness, and those who are in the quarantine may experience isolation, depression and rage, along with other emotions (Wiederhold, 2020). Consequently, isolation has made some patients escape away from the hospitals and hide thus spreading the disease further. Peoples suffering from covid19 committing suicide were also noted. Thus, we can see that the pandemic is having a psychological impact on the patients as well people around them leading to these kinds of situations. Therefore, to help preserve the isolation, it is important to raise the trust of the patients as well as fellow citizens. People ought to be advised to report whether they have any signs or know anyone with the condition as quickly as possible to get provided with help.

Setups of equipment and bed

Health care personnel and facilities are scarce and can not accommodate a large number of infected patients (Vellingiri *et al.*, 2020). Developing and poor countries lack an adequate health care system to wage a strong attack (Arora *et al.*, 2020). The primary goal for the health system is to brace hospitals and clinics for the unexpected heavy-volume inflow of patients requiring the development of procedures for the trial and isolation of patients in emergency departments so that COVID-19 patients will not interact with “regular” patients and spread the infection (Rudnicka *et al.*, 2020). Due to the shutdown, schools, colleges, 'dharamshalas' are all vacant which can be used to isolate the infected patients. As seen in other countries, the use of stadiums as emergency covid19 can be done in India also.

Availability of diagnostic testing and screening

The key problem in India is the availability of diagnostic testing resources which are required in large quantities and at the point of care. Experts in public health need to expand the testing to all patients with serious acute respiratory distress syndrome or extreme pneumonia, and finally to patients with moderate symptoms (Rudnicka *et al.*, 2020). Less number of health care professionals is also leading to a delay in the screening of people around. Thus other health professionals like physiotherapists, occupational therapists, dentists, should also be trained with the procedure of screening. It is necessary to increase the number of “COVID warriors” so that the country is not on short of health professionals and tackles the disaster in time.

A strategy developed by Kerala suggests the build-

Table 1: A brief overview of coronavirus

Virus	COVID19
Host	Bats,pangolins
Incubation period	3-14 days(peak- 12.5 days)
Spread	Human-human via the respiratory droplets while coughing and sneezing;can spread from an asymptomatic, carrier as well as an infective state of a person depending on the immunitystatus (Singh <i>et al.</i> , 2020).
Symptoms	Triad-fever, dry cough and dyspnea (Singh <i>et al.</i> , 2020).
Complications	severe acute respiratory syndrome, pneumonia, kidney failure and sometimes death(in severe cases) (Banerjee and Arora, 2020)
Treatment	As such no specific vaccine available. A vaccine is under trial phase 1; hydroxychloroquine & Chloroquine in less severely ill patients is proven to be beneficial (Singh <i>et al.</i> , 2020).
Prevention	Isolation being the mainstay. Use of masks, maintaining hygiene, proper hand-washing, proper cooking techniques, proper sneezing techniques, early medical approach. Educating other people about the same

ing of inexpensive kiosks for mass collection of samples of people for COVID19 to increase testing. Another strategy by the city Bhilwara in Rajasthan has come to notice, called SCST- Surveying, Combining, Screening and Testing. There was extensive door to door survey done covering 22 lakhs of the city’s population within a week, to determine who was suffering from influenza-like symptoms. Around 7000 people were quarantined and also monitored via an app. The city now disinfects its containment zones and hotspots every single day. Thus, a similar strategy can be applied to other regions of the country also.

Assisting the quarantined

Due to the long-term shutdown, there has been shut down to the income of a lot of people also. India is a developing country comprising most of its population from the rural and middle class. Thus, measures have to be taken to provide them with assistance in time for survival. To prevent another crisis in the time of an existing crisis is essential.

Herd immunity

Most deaths have arisen in the elderly population as a result of novel infection with coronavirus, while the children and the young adults have comparatively milder diseases. Therefore, the COVID-19 infection would cause the host or the patient to develop humoral as well as cell-mediated immunity and at the same time, the immune selected viruses may acquire mutations with greater potential for infection or altered antigenicity. This would undoubtedly strengthen them during subsequent waves of infection to avoid pre-existing immu-

nity (towards their predecessor counterpart) in the host (Biswas *et al.*, 2020).

To be prepared for upcoming challenges

In the coming days, the patients who have completely recovered from COVID-19 and those who are asymptomatic but may exhibit viral shedding in faeces are going to pose a new problem for hepatologists and gastroenterologists. Is there going to be a 2nd epidemic, reactivation and new wave of infection of COVID-19 via a faecal-oral route? The need of the hour is to undertake well-planned clinical trials of symptomatic and recovering patients to produce more scientific data not only on the progression of the disease but also to establish appropriate techniques for clinical management (Sarin, 2020).

A big aim of the public health sector is to reduce the progression and flatten the disease curve’s edge. To accomplish this goal, authorities must inform the public about the various facets of disease transmission that need to be addressed immediately to combat the disease.

CONCLUSIONS

Strategy and approaches to public health may be similar in such circumstances around the world. To prepare well is a priority, and it will be an important lesson to learn from this pandemic. COVID-19 is a wake-up call and a perfect exercise for reassessing the efficiency and resources of the medical research sectors of each country. In brief, this pandemic has affirmed the value of a saying "prevention is better than cure," and has trained humanity physically to

face and defeat this pandemic. It has also identified flaws in how we talk about healthcare and how we plan for the disease. COVID-19 is not only a burden but also an incentive to develop our services and systems for health care, but most of all, to understand how to be more alert during the next emergency crises.

Authors' contribution

All authors made equal contributions to the creation and design of the study. All authors read and approved the final manuscript for publication.

Conflict of interest

The authors declare that they have no conflict of interest.

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