

Key Learnings from the COVID Resurge – Putting Healthcare First and Ramping Up Resources: Recommended Action Points to Handle Such Pandemics in Future

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Abstract

The second wave of the COVID pandemic has had a sudden and severe impact on India. This grueling period was associated with the shortage of healthcare resources like hospital beds, oxygen supply, and medicines along with overburdening of health workers, and a very high toll of community suffering and loss. A combination of highly infective viral variant strains with the backdrop of premature complacency, removal of restrictions and abandonment of COVID appropriate behaviour may be responsible factors in hindsight. However, important learnings and action points acquired from the COVID resurge, can be valuable to avert such situations in future. These include focusing on maximizing population vaccination; continuing enforcement of safety norms with the graded lifting of restrictions; using data tools and medical research for prediction, analysis and timely decisions; ramping up healthcare resources and production of medicines, lifesaving equipment and vaccines; and having regulations and mechanisms in place to tackle misuse and illegal activities. Above all selflessness and unity at the level of the administration, community and individual are the needs of the hour in such a challenging situation.

Keywords: COVID, second wave, healthcare, learnings, pandemic

Introduction

The current second wave of COVID has hit the world community especially India with a vengeance and the havoc it has created is much worse than the first wave in 2020. It is up to the scientific community to quickly analyze how long the present wave will last. During the first wave, thanks to technology, it did not take long for mankind to shift to alternate means of survival and sustenance of business operations.^[1] The education system promptly went into the online mode that has now become the primary mode of teaching.^[2] It didn't take long to start virtual laboratory sessions, and even the examinations were held online so as to recoup lost offline sessions

and save an academic year. Work from home became the name of the professional game, allowing people to run offices and businesses through virtual workshops, seminars, and conferences without having to travel at all. Shopping has more or less become an online phenomenon to avoid visits to crowded markets and malls.^[3] Food too is being ordered online like never before and sensing the demand for delivered food, entrepreneurs have expanded the cuisines and culinary fare available for the consumers. Even while there has been a decline in some businesses in the organized and unorganized sectors, many new entrepreneurs have also sprung up ushering in a new wave of innovative ideas.

In the medical retail sector, products such as personal protective equipment (PPE), masks, nutritional supplements and sanitizers, etc. are being increasingly made and also subjected to innovations, while those never manufactured in the country are being exported in under a year.^[4] The innovations and new systems, however, largely eluded the country's core medical care apparatus. The health workers have been

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struggling to cope up with the pandemic and trying to put their best foot forward through the first and second wave, to treat affected patients, save lives and contain the situation as quickly as possible. It is commendable how the medical community has immediately empowered itself with updated disease knowledge, treatment and care protocols, and intensifying ground efforts to tackle the resurgence. The scientific community and administration also did their best to counsel and educate people to respect and follow safety norms and wear masks, maintain social distancing and wash their hands regularly.

The public healthcare system is bursting at the seams, with a lack of resources, equipment and planning evident with the surging pandemic second wave, which is only making things worse. This is something very important to be guarded against lest it demoralizes the nation.^[5]

There are also disturbing scenes of over-burdened front line health workers overwhelmed by the scale of the surge in terms of both the sheer number of people requiring higher medical care for severe COVID and the post-covid diseases like Mucormycosis.^[6] Equally disturbing are reports of black marketing of essential drugs and oxygen, and news of possible unauthorized hospital admissions, duplicate or fake medicines and non-standardized medical equipment.^[7,8] All this adds up to a bizarre situation where the conscience of those indulging in these practices seems to have perished. The Indian government has taken some appreciable and exemplary measures during the pandemic, however, the onslaught of unpredictable virus variants on one of the largest, most diverse and high-density populations of the world has understandably been crippling and devastating. The need of the hour is for everyone to come together keeping politics, ego and personal gains at bay and fight the pandemic selflessly. Lessons learnt from the pandemic should make way for caution and timely action points for effectively handling such situations in the future.

Key Learnings

The learnings from the pandemic requiring consideration for PPP (Prediction, Planning, Preparedness), have been summarized below as five aspects for action:

a) Not dropping guard before adequate population vaccination: Even if the cases have dropped significantly, and it seems reasonable to restart workplaces, institutes and social life, there should be no laxity in safeguards like protection with mask, sanitation and social distancing. Opening up should be guarded, gradual and graded with the continuation

of virtual and digital means wherever possible. This should be the norm till vaccination of greater than at least 50% of the population is achieved across age-groups including vulnerable groups like children, to ensure one protected for each one not protected and an imminent herd immunity.^[9] Once effective vaccines have been developed and made available, the utmost priority should be to achieve and maintain the highest possible rate of population immunization and vaccine production capacity irrespective of the stage or severity of the pandemic at that time. Vaccine clinical trials in children should be initiated post interim phase 3 evaluation in adults itself.

b) Improving prediction and informed decision making with medical research and data analytics:

Investing in medical and epidemiological research is now a requirement for all countries. Scientific data generation and its analysis with extrapolation through predictive models and artificial intelligence (AI) can be used for predicting subsequent wave characteristics and intensity, to enable timely decisions, preparation and resource allocations.^[10] During an ongoing pandemic, constant data monitoring, studying trends and detailed statistical interpretations can also greatly improve disease understanding and guide planning and management strategies.

c) Ramping up healthcare resources: The pandemic imparts the vital learning that in India even if a small percentage of the population is affected, the actual number and impact on healthcare is so severe and huge that there is bound to be a shortage on multiple fronts. Therefore continually enhancing and improving healthcare infrastructure should always be a national and state priority.^[11] This includes diverting more budget to healthcare, increasing bed capacity in existing hospitals, improving the condition and facilities of district hospitals and rural community health centers, creating more basic medical treatment and isolation centers in the interiors, making arrangements for more emergency and life-saving equipment like oxygen plants and ventilators, and constantly increasing public awareness of health and hygiene.

d) Increasing trained healthcare manpower:

Overwhelming and overburdening of healthcare personnel has been an unfortunate bane of the pandemic. Therefore, increasing trained healthcare manpower cannot be emphasized more at this juncture.^[12] Apart from more medical education institutes to produce qualified doctors, it is also important to design and put in place training pro-

grammes and certifications in allied healthcare for nursing staff, laboratory technicians, hospital workers, digital health guides and counselors. Virtual and simulation platforms can be effectively utilized for the same like the Integrated Government Online Training platform.^[13] Bringing together family physicians and general medical practitioners of different systems of medicines with a common treatment protocol and pandemic management training can be an effective way of scaling up access to the appropriate treatment of a large population.^[14]

- e) **Increasing production and regulation of medicines:** It is clear from the pandemic, that shortage of essential medicines can become acute in a very short span of time during a surge. However, to avoid expiry and wastage of medicines when over-produced, there should be both regulatory and manufacturing planning on how to scale up production of all identified essential and emergency medicines in time of dire need.^[15] Over the counter, and non-prescription sale of medicines like corticosteroids and antimicrobials should not be allowed, and strictly monitored. Hoarding, black marketing and spurious/fake drugs should be promptly identified, curbed and punished.

Conclusion

The pandemic has imparted the valuable lesson that nobody is safe unless everyone is safe, and premature shedding of safety norms and restrictions before maximizing vaccination can make further waves and resurgences of the disease devastating. Healthcare should be prioritized, planned and continuously enhanced at all levels with the help of constant medical research and data monitoring. The current challenging situation in India calls for unified efforts from government and private quarters, with a major contribution by the common people, towards following safety norms and helping those in need at whatever individual and collective level possible, putting aside personal, political and financial gains. Life, not money or power, is valuable as it will never come back once lost.

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