Covid 19 and Indian Healthcare System: Are We Really Ready to Face the Global Pandemic

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Abstract
The COVID-19 pandemic is worldwide wellbeing and financial emergency of a scale never saw. Starting in China, it has, inside a couple of months, crushed numerous nations throughout the planet, requiring an uncommon assembly of wellbeing frameworks. While the infection brought about by this novel infection is, for the most part, gentle and self-restricting, the danger of serious illness is lopsidedly great among old and those with basic ailments. Without an antibody or treatment, the general wellbeing techniques include: (a) forestalling transmission through early discovery and separation, following contacts and isolating them and execution of measures, for example, social removing and hand cleanliness and (b) decreasing mortality by enlarging clinical administration and protecting the weakest populaces in the general public. The pandemic is one more update. We need to put resources into general wellbeing, increase public abilities to recognize an illness early and react quickly to arising contaminations, fortify and regard our public establishments and depend on proof base for policymaking. Ample opportunity has already passed that we paid regard to these exercises and fortified immediately our wellbeing framework limit, as plagues and pandemics of this nature will keep on general testing wellbeing great into what’s to come. This paper attempts to comprehend the various parts of monetary difficulties looked at by the Indian medical services framework and devise the potential measures to beat the impact of the COVID-19 pandemic in India. It investigations the present moment and conceivable long haul effect of this pandemic on the medical services area of India as far as productivity and value.

Keywords: Pandemic, Covid 19, Health care system, India

Introduction
Coronavirus caused by the SARS-CoV-2 infection is a quickly developing pandemic influencing 213 nations, with more than 153,831,149 cases and 3,220,589 (Data as of 3 May 2021) passing around the world. In India alone, COVID-19 records 341,364,2 cases and 21,895,9 (Data as of 3 May 2021) fatalities. The rising number of cases and mortality appears to extend the operational limit of monetary foundations and medical care frameworks of even the created countries near the very edge of breakdown (Dhar). Arising economies like India are at a monster hazard for monetary insolvency, downturn, and confusion. With the execution of a broad countrywide lockdown (from March 25th, 2020 till March 31st, 2020) on the planet’s second-most crowded country with a $2.87 trillion economies to smooth the pandemic bend, the monetarily devastated segments of India are nearly distress and serious emergency. Even though the public authority supported guide programs appear to offer some cushion, it is still horribly deficient in managing the huge aftermath. With no unequivocal healing medication set up, COVID-19 has released a philanthropic emergency of lopsided greatness, leaving negligible choices.
Even though the early reaction to this emergency was not generous, we saw huge improvement later, showing an extreme change in medical services and monetary arrangements to counter the circumstance. Today, India brags of one of the world’s most minimal COVID-related mortality and is completely equipped to lunch the world’s biggest immunization program against COVID-19. In this situation, we encountered both a transient leave technique and a drawn-out emergency course of action that may be chalked out to deal with the current circumstance, focusing on medical care and the economy following a two-dimensional way to deal with beat the present monetary droop.

Restorative and Preventive Options for COVID-19

India’s wagered on modest and moderate medication for its enormous populace filled the repurposing of a few medications, including the antimalarial drug hydroxychloroquine (HCQ), for COVID-19 prophylaxis(Sah and Das). However, it was before long understood that HCQ couldn’t fill in as an answer for this pandemic. Further, HCQ is not under suggestion for COVID-19 prophylaxis by the World Health Organization (WHO) and European Union (E.U.) because of its unfavorable impact on wellbeing and cardiovascular danger and no huge gainful impact on COVID-19 severity. The trust is on a couple of applicants like Gilead’s Remdesiver and comparative, which are currently being suggested in India with some useful results. Public Institute of Allergy and Infectious Diseases (NIAID), USA supported Adaptive COVID-19 Treatment Trial (ACTT) preliminary showed Remdesivir with a more limited recuperation time in grown-ups with COVID-19 when contrasted with the placebo. Furthermore, an as of late finished ACTT-2 preliminary led to see the viability of calming Baricitinib to Remdesivir in treating the COVID-19 patients showed that Baricitinib in addition to Remdesivir were better than Remdesivir alone in treating the serious COVID-19 patients(AK, A and R). The break discoveries of quite possibly the broadest worldwide clinical preliminaries dispatched by WHO more than 30 nations, incorporating India with numerous COVID-19 patients, alluded to as the WHO Solidarity Trial, which was directed to investigate a compelling treatment alternative for COVID-19, exhibited that everyone of the four medicines (Remdesivir, hydroxychloroquine, lopinavir, and interferon-β1a) had almost no advantages in hospitalized COVID-19 patients in term of generally speaking mortality, the commencement of helped ventilation and length of clinic stay(CP, KA and NW).

Effect of COVID-19 on Economy of India and Government Emergency Response

India’s casual area, one of the greatest among the five South Asian nations right now, utilizing 80.9% of the labor force, is by all accounts the most vulnerable. With a help area-based economy in India, contributing an astounding ~54% of absolute (GDP), it endured the greatest shot. More than 122 million Indians lost their positions just in April 2020 because of the COVID-19 countrywide lockdown. Around 75% (91 million) of them were blue-collar low paid laborers(Chandrasekhar, P and G). Around 100,000,000 positions in India will be in danger post-COVID-19 lockdown with an expected 15–30% cutback in a few sectors. What is even most noticeably awful is that a huge part of these positions may be gone perpetually as managers discovered that mechanization and internet business stages are more dependable than people. With corporated adjusting to make do with a downsized labor force, “telecommute” is another ordinary. This fills the double need, lessening framework and overhead expense in addition to making do with lesser staff.

With the economy nose driving and development rates running into negatives, the Indian economy, which was at that point wiped out, presently is by all accounts scrambled for ventilator support(C, Z and N). Without an administration bailout, a few private areas are destined and going to petition for financial protection. Practically 80% of Indian organizations have experienced a serious money smash, with more than half of organizations confronting tasks issues. The Federation of Indian Chambers of Commerce and Industry (FICCI) expressed that the pandemic had affected near 60% of organizations influencing reimbursements, premiums, charges, business, benefits, and so forth.
The Government is putting forth a valiant effort to beat this vulnerable circumstance. It is swaying to choose the best methodology to find harmony to restore the economy without endangering its residents’ wellbeing. Without a monetary recovery, it is up and coming that India could be going towards worldwide starvation and soar destitution with cataclysmic results. In any case, kicking off business, not surprisingly, implies presenting the residents to the infection. This likewise chances to extend the medical care framework to its roof. Picking both of them will come at a high cost. There is a vital tradeoff here. Prevailing upon COVID-19 appears to be a slim chance; all things considered, limiting the casualty and relieving hazard is the excellent mantra now(Aritra, Nundy and Tapas).

This was as of late saw in India, in the consequence of lockdown and conclusion of work-destinations and pay, constrained more than ten a great many workers and low compensation laborers with their families hitting the roads to embrace a departure excursion of a few hundred kilometers in length by-foot,31,32 from the metropolitan agglomerations back to their townhome, conveying with them the illness, wretchedness and broke fantasies about ascending the social stepping stool. Organizations could do little to keep these people groups from abusing state-gave rules and limitations. Social removal and other preventive measures may become futile once individuals are in the city, frantic for occupations, and answerable for taking care of families back home (S, S and N.P). It is a dilemma circumstance. Through the association government’s drive, “Independent India Mission,” with an uncommon alleviation bundle worth Rs.20 trillion, it has assisted the country with reestablishing the crashed economy somewhat. Be that as it may, the more monetary lift is as yet needed to recapture the pre-COVID-19 circumstance in the Indian Experience.

Theoretical: With its 1.3 billion populace and confronted with the COVID-19 pandemic, India is at the intersection of two critical choices, adjusting medical care and the economy. To forestall the local area spread of the infection, the Indian Government forced a cross-country lockdown(Konwar and VivekBorse). Even though at first fruitful somewhat in containing the sickness spread, the all-inclusive lockdown, at last, prompts a spiraling out impact bringing about the log jam of the economy, which, like this, lead to far-reaching outcomes influencing the existences of millions of individuals, for the most part, those at the foundation of the social pyramid (Omer SB). We researched the ramifications of few government arrangements taken during this pandemic and their effect on society, subsequently recommending momentary emergency the board with long haul arrangements. Here, we present an extensive record of Indian strategy in managing the COVID-19 emergency, adjusting financial and general well being (P, K. and Surbhi). We additionally investigated a future emergency course of action for hazard relief alongside a couple of proposals. This perspective will be valuable for powerful medical services, the executives and the economy in Asia’s crowded country in the COVID-19 and plan for a future emergency of this nature.

India’s Health Care Infrastructure Prepared to Handle the Second COVID-19 Wave

The novel Covid sickness (COVID-19) has seethed into a second wave which has become more testing in April: More than 273,000 news cases were recorded on April 19, 2021, and 1,620 passing(Chatterjee, Kumar, and Shankar). This all the more destructive eliminate has focused on India’s wellbeing framework and the enhancements made somewhat recently. Shortage of testing packs, antibodies, clinic beds, clinical oxygen, and so forth have been accounted for from a few states(Sumanta and Saurav).

How very much did we use the time and our learning since the flare-up started. Here are a few insights

The Government of India supported a Rs 15,000-crore ‘Coronavirus Emergency Response and Health System Preparedness Package’ on April 22, 2020, to help India’s general wellbeing framework area(K).

The states have utilized this to expand the quantity of oxygen-upheld beds, emergency unit beds and ventilators.
Table 1: Public Health Infrastructure Status As of 21 April 2020

| State                        | No. of Oxygen Supported beds | No of Intensive Care Unit (ICU) beds | No. of Ventilators |
|------------------------------|------------------------------|--------------------------------------|-------------------|
| Andaman and Nicobar Islands  | 60                           | 9                                    | 4                 |
| Andhra Pradesh               | 2643                         | 2901                                 | 1134              |
| Arunachal Pradesh            | 179                          | 50                                   | 14                |
| Assam                        | 687                          | 485                                  | 343               |
| Bihar                        | 1677                         | 413                                  | 191               |
| Chandigarh                   | 330                          | 47                                   | 46                |
| Chhattisgarh                 | 571                          | 468                                  | 256               |
| Dadra & Nagar Haveli         | 23                           | 23                                   | 23                |
| Daman & Diu                  | 89                           | 15                                   | 15                |
| Delhi                        | 115                          | 370                                  | 282               |
| Goa                          | 198                          | 118                                  | 66                |
| Gujarat                      | 4061                         | 1292                                 | 803               |
| Haryana                      | 4170                         | 2129                                 | 1035              |
| Himachal Pradesh             | 771                          | 115                                  | 75                |
| Jammu and Kashmir            | 1245                         | 252                                  | 159               |
| Jharkhand                    | 524                          | 400                                  | 198               |
| Karnataka                    | 3361                         | 1432                                 | 311               |
| Kerala                       | 1009                         | 929                                  | 309               |
| Ladakh                       | 109                          | 37                                   | 16                |
| Lakshadweep                  | 2                            | 14                                   | 13                |
| Madhya Pradesh               | 647                          | 939                                  | 683               |
| Maharashtra                  | 11254                        | 4664                                 | 2099              |
| Manipur                      | 111                          | 20                                   | 22                |
| Meghalaya                    | 120                          | 35                                   | 11                |
| Mizoram                      | 210                          | 35                                   | 29                |
| Nagaland                     | 36                           | 31                                   | 21                |
| Odisha                       | 2769                         | 306                                  | 188               |
| Puducherry                   | 177                          | 180                                  | 96                |
| Punjab                       | 2696                         | 1221                                 | 547               |
| Rajasthan                    | 6724                         | 1797                                 | 1318              |
| Sikkim                       | 224                          | 20                                   | 57                |
| Tamil Nadu                   | 3264                         | 2347                                 | 990               |
| Telangana                    | 181                          | 1977                                 | 482               |
| Tripura                      | 10                           | 13                                   | 6                 |
| Uttar Pradesh                | 3391                         | 1061                                 | 890               |
| Uttarakhand                  | 729                          | 227                                  | 109               |
| West Bengal                  | 8091                         | 988                                  | 317               |
| Grand Total                  | 62458                        | 27360                                | 13158             |

Source: Ministry of Health, Feb 2, 2021
Till January 2021, the nation added 94,880 oxygen-upheld beds. In April, a year ago, the nation had only 62,458 beds with oxygen, as per information introduced by Ashwini Kumar Choubey, Union priest of state for wellbeing and family government assistance in the Rajya Sabha Feb 2, 2021. Maharashtra and Tamil Nadu represented 16,000 and 17,000 of these extra beds, individually. These figures appear to be generous in total numbers, however, less when we contrast them with the COVID-19 weight of these states.

Maharashtra was the most noticeably awful hit during both the significant floods of COVID-19 cases in the country. On April 5, 2021, the state had 55% of the country’s 103,558 dynamic cases.

It additionally represented more than 46% of the all-out 478 passing on April 5, 2021. In a similar period, the number of oxygen beds in Delhi and Tripura expanded 51 and multiple times, separately — the greatest leap in the country. The capital presently has 5,977 such beds, in contrast with only 115 in April 2020. Tripura had only 10 oxygen-upheld beds in April a year ago and now has 506.

| Table 2: Intensive Care Unit (April 2020 - January 2021) |
|--------------------------------------------------------|
| **State** | **No. of Oxygen Supported beds** | **No. of Intensive Care Unit (ICU) beds** | **No. of Ventilators** |
| Public sector | Public sector | Public sector |
| Andaman and Nicobar Islands | 151 | 24 | 20 |
| Andhra Pradesh | 10,917 | 2,325 | 750 |
| Arunachal Pradesh | 328 | 67 | 24 |
| Assam | 1,529 | 353 | 279 |
| Bihar | 6,123 | 553 | 799 |
| Chandigarh | 885 | 113 | 46 |
| Chhattisgarh | 1,310 | 476 | 376 |
| Dadra & Nagar Haveli | 200 | 46 | 46 |
| Daman & Diu | 139 | 21 | 11 |
| Delhi | 5,977 | 2,231 | 892 |
| Goa | 134 | 52 | 169 |
| Gujarat | 8,124 | 1,559 | 2,143 |
| Haryana | 3,181 | 451 | 271 |
| Himachal Pradesh | 912 | 75 | 116 |
| Jammu and Kashmir | 3,251 | 377 | 641 |
| Jharkhand | 1,927 | 332 | 243 |
| Karnataka | 8,154 | 1,998 | 1,263 |
| Kerala | 1,857 | 1,130 | 618 |
| Ladakh | 139 | 41 | 45 |
| Lakshadweep | 21 | 14 | 10 |
| Madhya Pradesh | 7,706 | 1,872 | 587 |
| Maharashtra | 27,319 | 5,326 | 3,767 |
| Manipur | 358 | 47 | 39 |
| Meghalaya | 307 | 71 | 80 |
| Mizoram | 306 | 44 | 70 |
| Nagaland | 142 | 54 | 28 |
| Odisha | 4,184 | 383 | 203 |
| Puducherry | 247 | 70 | 63 |
India has 36,008 ICU beds at present, contrasted with 27,360 in April 2020. Of these 8,648 extra beds, Maharashtra has had the option to add just 672 ICU beds — a development of 14%.

Delhi, then again, added 1,861 ICU beds. The current absolute is multiple times that of last April’s levels(Singh).

Indeed, even amid the second flood in cases, Haryana, Punjab, Puducherry, Goa, Himachal Pradesh, Rajasthan, Assam, Andhra Pradesh, Telangana and Jharkhand have diminished the quantity of ICU beds in their states. Haryana and Punjab, where cases are rising consistently, have diminished ICU beds by 79 and 70 percent, individually. These states have likewise decreased the number of ventilators by 73 and 78 percent, individually.

The subsequent wave, ascribed to the new Covid strains in the nation, could be deadlier, said Dr. Randeep Guleria, head of AIIMS, Delhi(N. Vasantha Raju).

India added 10,461 ventilators since April 2020. While 26 states, including Maharashtra, have fortified their basic consideration framework by adding ventilators, the number has decreased in nine states, as indicated by wellbeing service information introduced in Rajya Sabha on Feb 2, 2021.

India’s medical services spending is wretchedly low. The nation positions second-last among nations in its district as far as general wellbeing spending as a portion of its (GDP), as indicated by the World Health Organization(DK.)(Laxminarayan, Wahl and Dudala5). With short of what one percent general wellbeing spending as a portion of GDP, India falls behind Bhutan (2.5 percent), Sri Lanka (1.6 percent) and Nepal (1.1 percent), showed the National Health

| State          | ICU Beds | Ventilators | Additional ICU Beds |
|----------------|----------|-------------|---------------------|
| Punjab         | 2,854    | 369         | 119                 |
| Rajasthan      | 5,776    | 1,246       | 944                 |
| Sikkim         | 209      | 20          | 57                  |
| Tamil Nadu     | 20,574   | 5,861       | 2,914               |
| Telangana      | 6,031    | 1,589       | 1,991               |
| Tripura        | 506      | 113         | 39                  |
| Uttarakhand    | 13,569   | 4,598       | 2,780               |
| West Bengal    | 2,615    | 543         | 570                 |
| Uttar Pradesh  | 9,382    | 1,564       | 606                 |
| Grand Total    | 157,344  | 36,008      | 23,619              |

**Source:** Ministry of Health, Feb 2, 2021

Coronavirus Vaccination Program in India

With its gigantically enormous populace loosened up in metropolitan and rustic areas, India’s all-inclusive vaccination program (UIP) is one of the biggest of its sort on the planet, focusing on near 2.67 crore infants and 2.9 crore pregnant ladies annually(K Chatterjee and Shankar). For the present COVID-19 emergency, India requires sufficient resourcing and setting up the ground for difficulties identified with the compelling conveyance in antibody conveyance, coordination, production, and accessibility(Anisha). As per the Government, ten antibody applicants have been upheld by the Department of Biotechnology (DBT), and five are in human preliminaries, including the Russian Vaccine Sputnik-V. The Indian administration reported a 900 crore ($121.6 million) monetary upgrade bundle called Mission COVID Suraksha (security) to speed up the antibody advancement program further. It merits referencing that India’s inoculation program is tuned to convey youth immunization (aside from pregnant ladies) (Mandal, Bhatnagar and Arinaminpathy). With no grown-up inoculation set up, there are tremendous difficulties to achieve the mission, explicitly to contact distantly found populaces(Staff).

**Potential Solutions and Future Recommendation**

Even though a matter of discussion, there is an intriguing two-dimensional way to fix both the debilitated economy and medical care emergency since the two are personally connected(Anup Agarwal and Mukherjee). The business sectors are seeing twofold difficulty. The creations are still down, and utilization is at the most reduced (Aman).
Expansion is rising consistently, and the GDP is declining. The Government should give liquidity to the monetarily denied segments in real money move to animate interest (Gopal, Sharma and Subramanyam). Further, a restricted, however, the focused methodology should be attempted to re-stimulate the wellbeing area and economy, in particular infusing cash and empowering loaning, administrative deferrals, and giving medical coverage to wellbeing experts and food and proportion for poor people. This ought to likewise be joined by postponing off credit reimbursements and taking care of huge monetary bundles to kick off the economy to extend government-sponsored schemes (Mishra and Mondal). For the medical care area, the Government should make the COVID-19 testing office free to all residents to distinguish sickness transporters and make do on less expensive, locally delivered. Parsimonious approaches to perform mass-screening and testing reduce expense per measure (Kumar, Bharti and Anukriti). The Government needs to guarantee more noteworthy support of private medical services suppliers excessively in this drive.

There are worries since, in a study, 47.4% of medical care suppliers felt that the private clinical area’s commitment has been imperfect. 58.2% idea that the Government had not elaborate enough on the private area; 45.1% idea they ought to be important for strategy making. As far as illness demonstrative is concerned, India will additionally have to grow its cross-country organization of symptomatic viral laboratories to the square/region levels to fulfill the expanding need and set up metacentric COVID and related irresistible sickness strength emergency clinics. India will also set up a microbe research focus with countrywide branches to distinguish and follow future overflow diseases influencing humans; We should acknowledge that this will work simply by cooperation, not by independence (Anuraj, Ritasha and Gulsheen). A peacetime preparing program in taking care of conceivably infectious sicknesses should be embraced to keep readiness at the toe so that groups of exceptionally talented and prepared doctors can be traced to the episode site to contain the spread and limit human misfortune productively Repurposing of conventional medications and the huge range of India’s common compound libraries to evaluate for remedial specialists should be sought after genuinely against future irresistible specialists.

**Conclusion**

Coronavirus has released a lopsided emergency that has overpowered both the economy and India’s medical services area. The Government needs to act quickly on both these fronts to make up for the misfortune and limit future calamity. This guarantees that satisfactory danger the executive’s conventions are set up, which can produce trust and certainty inside the populace, the lion’s share of whom are underneath the neediness line and are intensely subject to government help and Government-sponsored programs. The emergency reaction likewise gives the central government and particular state governments the chance to change the frail wellbeing framework through more prominent financing, more coordination among specialists, and laced public-private association—all of which can go far intending to the pandemic and the in-constructed deviations and tireless delicacy in India’s clinical medical care framework. It is by advancing logical examination, developments, headways in clinical equipment’s, innovation to battle pandemics/plagues, groundbreaking thoughts, and so on the world can be prepared to save themselves from future flare-ups, just the readiness can stop future closures, lockdowns of the entire nation, Deaths, Panics, Chaos because of dangerous infections. Next time infection mustn’t get us unsuspecting, the shock is an alternate route around.

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