

CHANGING SCENARIO IN INDIAN HEALTHCARE SECTOR AFTERMATH COVID-19

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ABSTRACT

The World Health Organization (WHO) has declared the new coronavirus pandemic is a general healthcare crisis which is a serious worldwide concern .With the hit of this pandemic entire country almost stopped and lockdown was imposed by the government which slowed the speed of transmission of infection amongst public. The healthcare system got badly exposed and lockdown gave sometime for the health infrastructure to meet the demands posed by this pandemic across nation. To avail the benefit of healthcare is a fundamental human right but the COVID-19 pandemic created unforeseen situations in healthcare systems everywhere and thereby affected people's primary care provisions. After unlock took place strict intensive screening of visitors is being undertaken if they belong to containment zone and to the condition of Indian healthcare system and impact of COVID-19 on it. This study is entirely based on the secondary data which has been collected from various online sources and from the surveys done by different reputed agencies. Further, the study analyses the condition of Indian healthcare system and the effect of COVID-19 on it and how healthcare system can deal with this pandemic. The study here suggests for an increase in the healthcare budget, improve research facilities, subsidies to medical device manufacturing industries and easy loans to pharma companies in order to boost the country's economy to overcome this pandemic and speed up the economic recovery of nation after unlock and also, extend the support worldwide. The study further concludes that there is a rapid surge of clinical manifestations and diagnosis facilities in response to this pandemic. Moreover, in terms of prevention and cure more sort of valid and reliable ways need to be addressed to citizen by the government officials to curb this type of panic situation amongst them in addition to vaccine which is under trial process.

Keywords: Healthcare Sector, India, COVID-19, Government, Medical Professionals, Unlock.

Introduction

COVID-19 pandemic created an environment of stretching healthcare infrastructure of even the most developed countries. Therefore, after the outbreak Indian scenario towards the healthcare sector also changed a lot. After the outbreak, India reduced the dependency on foreign countries by increasing the rate of production of items like healthcare supplies, protective gears, drugs and medical equipment's which are in high demand globally due to this pandemic which helped in boosting the country up in to the fight against novel corona virus gradually.

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Today approximately more than 60 million PPE Kits, 150 Million N-95 Masks have been produced till October and over 600 companies are certified to manufacture these kits. A usual PPE kit consist of mask, eye shield, shoe cover, gown and gloves which doctors and healthcare workers wear during treatment of COVID-19 patients. Earlier, there was no production of PPE kit by domestic manufacturers in the country and almost all of them were being imported. The ventilators were in shortage initially however production increased over the time due to surge in demand. Some innovative doctors namely Dr. Deepak Agarwal, Professor of neurosurgery at AIIMS and Mr. Diwakar vaish, a Robotics scientist developed World's cheapest ventilator AgVa which has the capability to inactivate the virus by negative ion generation to some extent. The rate of manufacturing of drugs have also increased simultaneously. The production of hydroxychloroquine increased drastically and approx. 50 million hydroxychloroquine tablets were exported to U.S. by April, 2020.

The Government to meet the requirement of patients added new beds and increased the capacity of intensive care units and isolation wards. The recruitment of medical practitioners on contract also started to mitigate the issue of shortage. Various private hospitals and nursing homes came forth to ensure 100 % preparedness for safety in the healthcare facilities and eventual treatment of patients. The Doctors fraternity in India themselves have still been investing their own resources in manpower, equipments, consumables in order to upgrade the facilities. The education and training has also been provided to health care workers which would help in handling such situations. The Government took several initiatives initially and still is in action, for the safety and precautions by converting medical colleges and railway coaches into isolation wards. Moreover, schools and colleges have also been converted into quarantine centers.

India has been preparing itself for COVID-19 testing on massive scale and as per the data provided by Indian Council of Medical Research more than 16 Crores sample testing has been done till date through RT – PCR (Reverse Transcription - Polymerase Chain Reaction).

Therefore, Indian government has geared up to provide better healthcare services to the patients, and fortunately number cases have also reduced in comparison to other countries and along with that vaccine trials are at extremity globally.

Review of Literature

Adhikari, et al. (2020) in their study tried to examine the causes, clinical manifestation and diagnosis and prevention and control of coronavirus disease (COVID 19) during the early outbreak and further study stated that COVID- 19 has been identified as the cause of respiratory problems which started in early December 2019 and 65 reviews have been undergone which were published before 31st January 2020 for the in depth analysis. Further it has been found that most of the publications were found in English language (89.2%) by majority of chinese scholars (67.7%). The articles covered under study initially emphasized on causes and later move to prevention and control. It has been suggested that due to no specific treatment has proven effective only symptomatic treatment and supportive care can be useful.

Singhal (2020) in his paper analyzed the review of COVID-19 and stated coronavirus as a public health emergency of international concern. The study highlighted that the disease transmits by inhalation or contact with infected droplets and the incubation period ranges from 2 to 14 days and symptoms are usually fever, cough, sore throat, breathlessness, fatigue, malaise among others. The study concludes that prevention through home isolation of suspected cases and with mild illnesses and infection control measures at hospitals might facilitate in mitigating the effect of infection. The study also mentioned that the virus spreads faster than its two ancestors the SARS-CoV and Middle East respiratory syndrome coronavirus (MERS-CoV) and its global impact is still uncertain.

Suryavanshi (2020) has studied on the covid-19 awareness prevention, diagnosis and treatment in his article. He further elaborated his study by covering various aspects like history, origin, microbiology, modes of spreading, signs and symptoms etc. Further he stated that by adopting some precautionary guidelines chances of infection can be reduced such as by thoroughly cleaning your hands, maintaining 1 metre distance, avoiding visits to crowded places and avoid touching face while going outside. The study mentioned that his pandemic outbreak is a challenge for all humans and has become a threat to humanity. The study concluded that only way to keep oneself safe and secure is through self- isolation and proper hygiene is to be followed and regular updates on WHO guidelines and following government measures would prove useful.

Research Gap

On the basis of literature review gone through several studies have been found on the effect of COVID-19 on Indian economy whereas less studies have been noticed on healthcare sector and development in this sector and its rising importance to curtail the effect of COVID-19 on human lives and economy as a whole. Therefore, to fill in this gap this study has been undergone emphasising the impact on healthcare system and medical professionals extending their services in this area for the benefit of country.

Research Methodology**Objectives of the Study**

- To know the extent upto which Indian Healthcare sector has been impacted.
- To know what challenges have been faced by Indian Healthcare system due to this outbreak.
- To know the changes witnessed by Indian Healthcare system during lockdown and after unlock.

Data Collection

The study has been illustrated on the basis of data collected from different secondary sources comprising of research articles, media briefings of health Ministry, media reports, expert opinions, blogs, reports of various reputed companies etc. For the purpose of study, WHO updates have also been followed to monitor the effect of COVID-19 on healthcare system of India and other countries.

Limitations of Study

- The study has been remained confined to secondary sources for data collection.
- The study is limited to single sector of Indian Economy.
- No inter and intra sectoral comparison has been done.
- It lacks comparative analysis of healthcare system amongst various countries.
- Being descriptive in nature it lacks empirical evidence.

Impact of COVID-19 on Healthcare Sector

The COVID-19 has shaken the health system, societies and economies around the Globe. Thus, healthcare sector is at the focal point of this phenomenal worldwide pandemic and this sector has met people high expectations by offering to the administration all the help it needed either it is extending help through sending staff in emergency areas or treating COVID-19 patients 24x7. To fight against this pandemic, appropriate steps have been taken whether it is related to increasing the manufacturing of PPE kits or face masks at large scale. Many small pharma companies also started with the production of sanitizers as consumption increased over the time. As of now, the only way to deal with the COVID-19 patients is through testing as vaccines are also under testing. As per Indian Council of Medical Research (ICMR) in India four vaccines are under trail which are COVAXIN developed and manufactured in Bharat Biotech's BSL-3 (Bio-Safety Level 3), Covishield has been developed by The Serum Institute of India and Indian Council of Medical Research and both are jointly conducting the controlled study on it, ZyCoV-D has been developed by Novel Biologicals, Biosimilars and Vaccines and lastly Sputnik which is also under clinical trials jointly by Dr Reddy's Laboratories Limited and Sputnik LLC.

Today approx. more than 60 crore samples testing has been till date through RT-PCR (Reverse Transcription - Polymerase Chain Reaction) test. India, at present has more than 1 Crore COVID -19 Cases out of which 96 lakhs have been recovered and 1.5 lakhs have lost their lives and as per experts, contraction trend of total cases has been witnessed.

According to the recent government data, India spends 1.3% of GDP on Healthcare which has to be augmented while as per VISION 2025, 2.5% of GDP is expected to be spent on healthcare. A major drastic change has occurred due to COVID-19 in form of production of personal protective kit which was almost nil before this pandemic and even masks production has faced sudden growth. As per Union Minister for Chemical and Fertilisers, India became second largest producer of PPE kits with daily production of 5 lakh PPE kits by domestic manufacturers. Therefore, this study has been conducted to find out the extent upto which COVID-19 has impacted Indian Healthcare sector.

Impact on Medical Device Industry

The India's imports have been probably affected intensely due to hard hit on imports of clinical items and gadgets etc. In 2019-20, India's 11% medical devices imports have been from China. India had been highly dependent on chinese imports for various clinical items including assortment of

consumables, disposables and capital hardware including orthopaedic inserts, gloves, syringes, gauzes etc. This immense reliance of the Indian clinical gadgets industry on China for clinical materials and electronic gadgets has declined over the time as local or domestic production is meeting the needs. The Government of India identified the Medical devices industry as leading Industry for the Make in India program and for this program, Government has announced two initiatives namely: The Production Linked Incentive Scheme (PLI) and The Promotion of Medical Devices Parks Scheme which would encourage the Make in India Motto.

Impact on Pharma Companies

The Indian pharmaceutical industry is the world's third biggest medication maker in terms of volume and the nation's market produces 60 % of world's vaccine. India has been supplying moderate and cheap generic medications to a huge number of individuals around the world and worked with US Food and Drug Administration (FDA) and UK Medicine and Healthcare items Regulatory Agency (MHRA) affirmed plants. Moreover, Active Pharmaceutical Ingredient (APIs) market was anticipated to achieve great amount of income. The Made-in-India drugs have been provided to many countries such as US, EU and Japan. During this period of lockdown all the availability of raw material stopped. As per Report of India Brand equity foundation, India's local pharmaceutical market turnover had arrived at ₹ 1.4 lakh crore (US\$ 20.03 billion) in 2019 and this data would most probably decline to some extent due to this outbreak. The Indian Pharmaceutical drugs are mainly known for quality standards and also exported to developed countries but faced competition also from china as china has more cost advantages in this segment.

Effect on Medical Staff

At this time of pandemic, medical staff are being praised as corona warriors but initially they faced shortage of personal protective equipments and this led to threat and more exposure to virus. Many medical professionals death were recorded in initial months of outbreak while they were fully devoted for their duties and even remained away from their homes. Unfortunately, as per Indian Medical Association nearly 196 Doctors have lost their lives till now. The Healthcare professionals have also been dealing with huge psychological stress and pressure. Since, the month of March when the covid-19 cases started in India, medical professionals pressure got multiplied and they had no option except to compromise with shortage of medical equipment and no reliable treatment for COVID-19 patients which made the life of medical professionals more vulnerable. The increased mortality rate amongst doctors is a matter of concern now for the nation and appropriate actions are required to be taken by the Government.

Effect on Private Hospitals

Many hospitals took a decision of housing the staff on campus to avoid further contact and spreading of virus. However, this created a lot of burden on hospitals for providing basic needs to staff members and increased their expenses. The hospitals had to create isolation wards for the COVID-19 patients and shutting down the OPDs as per government orders even affected the 70-80% of their incomes severely. The lack of ventilators in many private hospitals to treat patients also created problem. Ultimately, all these have proven to be temporary solutions and for the long term solutions district hospitals, medical colleges and primary health care infrastructure need to be strengthened in terms of medical equipments and infrastructure altogether. As per CRISIL Report postponements of surgeries created the revenue loss and cost also increased which downturn the 35-40% operating profits and hospitals even availed the moratorium for loan repayments to bear their running expenses.

Impact on Government Hospitals

All the OPDs of government hospitals remained closed during this outbreak and this directly affected the poor section who remained dependent on government hospitals for treatment and even struggled for basic medications. As government hospitals have limited staff and out of them also many staff members were assigned duty to treat COVID-19 patients which eventually generated shortage of medical professionals. The upgradation in government hospitals hygiene is to be maintained which is currently not ideal for our health care system. The Doctor population ratio in India is 1:1456 against the WHO recommendation of 1:1000, due to which shortage of doctors has been felt. Even Low Bed Density turned out to be a major hindrance as one government hospital bed per 1844 population is a challenge. The pandemic has led to gradually recovery in healthcare system as there had remained acute shortage of basic and N95 masks initially but from the very first week of April, sudden hike in manufacturing was witnessed which became possible with the collaboration of local manufacturers and research and development organisations.

Findings

On the basis of above discussion, it has been found that India has to work a lot in the healthcare sector when India is already on 154th position among 195 countries on healthcare index. India has to work hard to encounter this problem and improve the healthcare infrastructure. Due to COVID-19, healthcare sector has been repositioned in Government's priority list. When pandemic just hit the country major shortages of PPE kits, Masks, Ventilators were a great challenge. Then through smart moves, proper arrangements and management production at local level started which removed the obstacle of shortage. The testing rate augmented which is good sign to beat this pandemic as testing is one of the best ways to find the infected persons and it will provide safeguard to others. The treatment and isolation of the infected patient have been the main reasons to control the spread of this virus. The medical professional shortage has also hindered in overcoming the problem to wide extent. Further, some major healthcare infrastructure deficiencies are being faced by the nation but Atmanirbhar Bharat agenda would fulfil them all.

Suggestions

- **Increase in healthcare budget allocations between national and state level:** Increment in the healthcare budget, government can ensure the safety of medical professionals and built more efficient hospitals. The problem of shortage of medical staff can be resolved through more recruitment which would turn the government healthcare system stronger. Advanced machineries for better testing can be purchased. The medical facilities can be extended to remote villages of the country with increased funds. On the other hand, there still exists dearth in ambulance services which has to look into to avoid any casualties due to delay in ambulance.
- **Developing medical research facility to much greater level:** The development in research area in medical sector is prominent as medicines would then be developed within the country itself leading to avoid dependence on imports. Rather, increase in production would be able to meet the demands for exports thereby generating more revenues for the economy and employment also. With better research facilities young scholars would be encouraged for research work and such facilities would help the medical and research professionals to improve medical healthcare system.
- **Providing subsidy to medical device industries:** This will provide aid to industries in manufacturing medical devices at large scale resulting in reduction in prices of medical devices so that great number of hospitals can afford them and provide better services. The subsidies would also attract entrepreneurs for start-ups and provide new job opportunities.
- **Indian Healthcare industry need to promote Ayurveda as well to boost immunity :**As per experts Ayurveda has been one of the oldest i.e approx. more than 5000 years and best ways to treat the diseases and Ayurveda has been officially recognised by WHO in 1976. Thus, Healthcare industry need to spread the benefits amongst the people to promote and boost the immunity of people.
- **Providing E-Consultation facilities:** The Remote care facilities and E-Consultancies/ teleconsultation facilities need to be utilized & promoted in case access to doctors is not possible.
- **Providing subsidy to medical device industries :** As the pharma companies faced problem in lockdown due to temporarily shutdown and later on when lockdown was uplifted they resumed their work with complete strength to produce more and quality medicines with easy loans as easy loans helped the industries to self-develop their infrastructure facilities and also led to increase in production rate. The terms of loans such as duration to repay also extended and interest rate also got reduced etc. for the benefit of companies.

Conclusion

Indian healthcare sector was already in a worse condition and this pandemic exposed the whole system but also paved the way for better. Indian healthcare sector is full of opportunities for industry players to invest in this sector. India, at present has more than 1 Crore COVID -19 cases out of which 96 lakhs have been recovered and 1.5 lakhs have lost their lives and as per experts, contraction trend of total cases has been witnessed. India's death per million population is also amongst the lowest in the world which stands at 106 and the global average is 216 as reported by ICMR Delhi. India through agenda of Atmanirbhar Bharat has already taken the responsibility of innovation and development of advanced technology which would prove to be a boon for nation's overall growth but at the same time its services must be accessible and affordable by the people and also suitable for them.

Therefore, more efforts are required to make the healthcare system better in terms of medical professionals, clinical equipments, healthcare services and infrastructure etc. This pandemic has become a threat to society and till the time vaccines are being under testing trials globally, only safety and precautionary measures can help in survival from infection.

Scope of Further Research

- This study can be further processed with primary data collection through questionnaire by knowing the perceptions of people associated with healthcare sector.
- This study can be elaborated through inter and intra sectoral analysis of Indian Economy.
- Indian healthcare sector be compared further with healthcare sector of other countries.
- Moreover, Empirical study can be undertaken for more reliability and authenticity.

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