Review Article

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Economic impact of COVID-19 on the Indian healthcare sector: an overview

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ABSTRACT

A fearsome health calamity- the novel coronavirus of 2019 struck the world and created havoc with its rapid spread. Various countries got affected in terms of economic and other losses and the extent of impact depended on the pre-existing financial arrangement of the country and various other factors. Due to this outbreak, healthcare sector was one of the worst affected. Also, it needed most investment and had to respond quickly and effectively to manage this crisis. Among the countries affected, India- a financial centre with significant worldwide connectivity was impacted directly, leading to an imminent breakdown of economical markets. This paper tries to understand the different aspects of economic challenges faced by the Indian healthcare system and devise the possible measures to overcome the effect of COVID-19 pandemic in India. It analyses the short term and possible long-term impact of this pandemic on the health care sector of India in terms of efficiency and equity. The Indian Government had acted rapidly to allocate funds, resources and manpower. It announced relief packages for the marginalized communities and covered costs. Specific research centres in the country need to work to quickly mitigate any further damage.

Keywords: COVID-19, Economic impact, Health economics, India

INTRODUCTION

A fearsome health calamity- the novel coronavirus of 2019 (2019-nCOV), also known as the severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) struck the world and created havoc with its rapid spread. The infection originated from an unidentified reservoir (suspected bats) in the Wuhan City, China in December 2019. With its ease of spread by infected droplets and through inhalation, the disease crossed borders and caused several cases and deaths, thereby being declared as a public health emergency of international concern (PHEIC) on 30 January 2020 and global pandemic on 11 March 2020, by the WHO.¹

The disease has an incubation period ranging from two to fourteen days but generally remains asymptomatic. If symptomatic, the common sign and symptoms observed include fever, dry cough, shortness of breath, weakness, throat irritation, restlessness and in severe cases leads to acute respiratory distress syndrome and pneumonia which on worsening can end up in multiple organ failure and finally death. The severe presentation of the disease and its associated complications are more rampant in elderly, young children and in patients with pre-exiting co morbidities.² Measures such as isolation, quarantine of suspects, stringent infection management actions, contact safety measures and social distancing are the mainstay for the prevention of COVID-19. Supportive care and various antiviral therapies are some of the management options being tried, with no conclusive treatment in place yet. A virus of such virulence has affected all sectors and the global economic effect of this new pandemic is not fully known yet.³

As of 31 May 2020, there were a total 5,934,936 cases and 67,166 deaths globally. On the economic front, this caused the operational pattern of supply chains to get

interrupted, thereby distressing companies throughout the world. Recession started taking over and people started losing their employment. The pattern of consumption changed by consumers and hoarding of good lead to deficiencies of numerous essentials. Instability and sudden reduction were recorded in the world economic markets with irregular effects across various fields. Various countries got affected and the extent of impact depended on the pre-existing financial arrangement of the country and various other factors. Due to this outbreak, healthcare sector was one of the worst affected. Also, it needed most investment and had to respond quickly and effectively to manage this crisis.⁵

Among the countries affected, India- a financial centre with significant worldwide connectivity of trade, economy, defence, culture, outsourcing workforce, manufacturing and services was impacted directly, leading to an imminent breakdown of economical markets. Healthcare sector underwent various changes and was significantly impacted, in turn affecting the entire population of the country.⁶ Being the second most populous country in the world, with a population of 1.35 billion, an uncontrolled pandemic in India, could impact almost 1/6th population of the world and therefore, a study of its trends and forecasts is imperative to formulate effective strategies.⁷

This paper, therefore, in the above background, tries to understand the different aspects of economic challenges faced by the Indian healthcare system and devise the possible measures to overcome the effect of COVID-19 pandemic in India. The aim of the paper is to analyse the short term and possible long-term impact of this pandemic on the health care sector of India. It is written with the objective of analysing the observed and potential economic impact of COVID-19 pandemic on the Indian healthcare scenario, in terms of efficiency and equity and formulating solutions to mitigate the damage.

METHODS

Data collection

For this analysis, various sources of data and documents were accessed, and information was collected from news articles (both online and offline), literature indexed in Google Scholar and the Ministry of Health and Family Welfare website of the Government of India. Websites of World Health Organisation, International Monetary Fund and World Bank were also referred. Data collection period was from 15 April 2020 to 31 May 2020, which was followed by analysis and documentation of findings and finalising the paper.

Data analysis

The analysis was started by looking at the pre COVID situation in India, followed by information about number of confirmed cases, deaths and average pattern of COVID

19 cases throughout the entire country. After this, documents collected above were sorted to look at the documents describing the economic impacts and the measures taken to address them. The effect of measures, if seen was also documented. The short-term impact on healthcare sector were noted and the potential long-term effects were charted out. Based on the lessons from previously taken steps and based on recommendations of National and International agencies, as well as steps by other countries, solutions were devised and curated to suit the country context.

UNDERSTANDING THE INDIAN HEALTHCARE SYSTEM

The power of decision-making related to "health" and the responsivity of functioning and strengthening of public health systems comes under state governments in India, rather than the centre. Indian healthcare delivery happens at both- private and public levels. The public system majorly provides primary health care whereas secondary, tertiary and quaternary services are provided more by private setups in big cities and are limited in the public sector.⁸

India's healthcare system is seen to have a competitive advantage due to the large pool of well-trained professionals and low costs of procedures, compared to other countries. It is growing rapidly by increasing the coverage and expanding public and private involvement, and is one of the largest sectors in India, in terms of beneficiaries, revenue and job creation. Also, a shift to mobile health, telemedicine, online patient registration and digital marketing and service delivery is seen in both sectors. Public health programme delivery is being streamlined using biometrics, unique identification numbers and storage clouds for health documents, with a comprehensive data protection policy for data safety and privacy.⁹

On the other side, India ranks 145th among 195 countries in quality and accessibility of care and its healthcare infrastructure is not one of the best.⁷ The average availability of beds per 1000 people ranges from 0.2 in some areas to 4.5 in others, with an overall average of just 0.5 beds for every 1000 patients in India. Approximately, only 70000 ICU beds and 40000 ventilators are available in the country.¹⁰ Also, cost pressures are a major problem in both public and private sectors. Private sectors manage finances by watching costs and offering specialised care. They try to maximise operational efficiency by using technology and high-end diagnostics.¹¹

COVID-19 ONSET IN INDIA

India reported its first COVID-19 positive case on 30 January 2020. This number rose to 50 cases in 41 days. In less than three weeks, the number of cases crossed the 300 mark, and this was followed by detection of 50 or more cases each day.⁷ From the 28 states and 9 Union

territories of India, COVID-19 affected nearly 75% of the areas of India with highest number of cases being recorded in states of Maharashtra and Kerala. Announcement of a one day "janata curfew" on 22 March 2020 showed a single day decline of cases, but till 24 March 2020, 536 people had tested positive and 10 deaths reported (case fatality rate ~1.9%). This day marked a landmark event as the country's Prime Minister announced a 21-day countrywide lockdown from 25 March 2020. On 31 May 2020, which marked the end of 4 phases of lockdown, India had a total of 182,143 confirmed cases and 5,164 deaths.

EFFICIENCY IMPACT OF COVID-19

Cost to health system

COVID-19 came as an unprecedented shock to the already parlous Indian economy. The gross domestic product (GDP) growth rate for India for the full financial year of 2019-20 had been slower (4.2% growth) than the previous years. ¹⁵ The severity of this health crisis, global economic decline due to COVID, the disruption of demand and supply chains, along with the imposed nationwide lockdown had acute as well as long lasting impact on this GDP and on the healthcare industry of India.

A large population, variations in resources across regions and a weak public health system in India posed a challenge in terms of time and preparedness to deal with an accelerating case load. ¹⁶ In terms of available funding, from the 3.6% GDP investment in healthcare, only 1.5% is by the Government, and more than 2% is borne by households, that is, 65% expenditure is out of pocket. ¹² The system in place, when COVID struck was thus underprepared to deal with this emergency.

According to FE Bureau, 2020, the revenue generation and free cash flows across the hospitals in the country was severely affected and this is expected to continue long term, till first half of financial year of 2021. The effect was seen on both, the out-patient division (OPD) segment due to lockdown, and inhibitions of the general public in going to hospitals as a precautionary measure and the in-patient division (IPD) because of the government's notification to postpone non-essential and elective surgeries. FE Bureau also mentions that the medical tourism has taken a major hit, with international travel being a major cause of the spread of COVID-19 pandemic, leading to no/slow influx of tourists, including medical tourists. The impact has been observed already and will continue long term.

Also, fixed costs such as doctor salaries, employee costs, and consultation charges (50%-60% to the overall costs for a hospital) may not be deferrable and the increase in the procurement cost of consumables such as medicines and sanitizers from the pharmaceutical sector for healthcare companies would impact the margin profiles.

Health system funding and fiscal implications

The increasing demand on health facilities and health care workers would overstretch health systems leading them to operate less effectively. COVID-19, thus, called for the Government to introduce financial packages for infrastructure improvement, procuring a greater number of testing kits and labs as shortages in medical supplies and an inability to provide adequate testing were the major issues faced by the Indian economy. A stimulus package at 0.8% of GDP was announced on 26 March 2020 and included in-kind and cash transfer to lower income households, insurance coverage of healthcare workers and financial support to low wage workers and others seeking jobs. 19

India was initially equipped only with 111 COVID-19 testing centres and around 60000 beds in government-run quarantine facilities across the country. This lead to patients depending on understaffed and underfunded state-run facilities for diagnosis and treatment.¹⁸ To address this, the country's Prime Minister, in April, announced 15,000 crore rupees (USD 2 billion) as 'India COVID-19 emergency response and health system preparedness package' with Rs.7774 crores allocated for Emergency response and rest for medium-term support (1-4 years) under mission mode approach.²⁰ Ministry of Health and Family Welfare (MoHFW) executed the health sector response with containment and control as key response strategies. As on April 9, 2020, as per the PIB Delhi report, a total of 223 labs (157 government and 66 private laboratories) started conducting rigorous screening. Also, Rs. 4113 crore had been disbursed to all the states and union territories for dealing with the emergency COVID response.

Fiscal policies, even assuming a conservative scenario where the government does not incur any additional expenses due to Covid-19, predict a greater deficit than the projected value in the 2021 budget. If the budgetary expenditure for financial year 2021 must be maintained at the same level as budgeted, the Centre will have to allow a huge fiscal slippage from the budgeted 3.5% of the GDP and incur a fiscal deficit of 5% or higher, owing to the COVID-19 fallout of a much-reduced economic growth and consequent sluggishness in tax receipts.²¹

Allocation of healthcare resources

The 15000-crore budget addressed emergency and long-term measures. Emergency response included ramping up the number of testing facilities and personal protective equipment (PPE), development of COVID-19 dedicated treatment facilities, centralized procurement of essential medical equipment and drugs required for treatment of infected patients, and training of medical and paramedical manpower. Long term measures included strengthening and building resilient national and state health systems to support prevention and preparedness for future disease outbreaks by setting up of laboratories and boosting

surveillance activities. It also included strengthening pandemic research and multi-sector national institutions and platforms for one health, community engagement and risk communication and implementation, capacity building, monitoring and evaluation, and bio-security preparedness.²²

These interventions and initiatives would be implemented under the overall umbrella of the MoHFW which is responsible for distribution of resources among the various implementation agencies like National Health Mission, Central Procurement, Railways, Department of Health Research/ICMR, National Centre for Disease Control.²⁰

The tourism infrastructure and railway infrastructure were included to get a greater number of quarantine zones. Private hospitals and labs supported to overcome the challenge of weak healthcare infrastructure in India.⁷

Insurance

During COVID-19, health insurance business is facing higher hazards and as per government directives, the COVID testing expenses covered by state governments whereas for positive cases, existing health insurance policies are asked to extend their coverage to include Coronavirus without having any specific exclusion. The Insurance Regulatory and Development Authority of India (IRDAI) also issued an advisory to insurance companies to expedite the processing of claims made in relation to COVID-19 pandemic. For below poverty line cases, COVID-19 positive individuals were to be covered under Ayushmann Bharat Health Insurance Scheme, a central government scheme. The covered was a contral government scheme.

Considering this directive, people having a health insurance policy prior to the pandemic, were already covered for claims related to Coronavirus disease and entitled to coverage for hospitalization costs, the medical expenses incurred during the treatment of the disease and medical expenses occurred during the quarantine period will be reimbursed by the insurance provider.²⁴ But, in India, as of 2018, 500 million people had not form of health coverage.⁸

A rise was seen in beneficiaries as purchasing of online Health Insurance schemes shot up by 30% and offline schemes saw a fallout.²⁵ Also, several general and health insurance companies introduced exclusive coronavirus health insurance policy offering a cover for pre- and post-hospitalization expenses, ambulance charges, and treatment expenses for coronavirus related symptoms. These policies are limited to one year and if someone contracts the infection during the period in which the policy process for activation is still ongoing, he/she will not be covered under the claims.²⁴ Though these insurance schemes offer the required funding support for the hospitals to carry on their treatments for COVID-19 patients, but such an increase in patients compared to its

cash patients could increase debtor days and lead to an elongated net working capital.

EQUITY IMPACTS OF COVID-19

Access to care and out-of-pocket expenditure

India's health system ranks as one of the most heavily dependent on out-of-pocket (OOP) expenditure in the world. India's elites may have also played a part in demanding greater funding for big hospitals (tertiary care) rather than seeking more investments in preventive public health interventions.²⁶ It is difficult for the Indian Government to cover the full spectrum of health-care needs because of persistently low public investment in health, a lack of human resources and poor health infrastructure, which increase the cost and the financial burden of care. Azhar pointed out that in low- and middle-income countries like India, the government's spending on healthcare is very little and healthcare financing is heavily relying upon out-of-pocket expenditure made by individuals.²⁷ OOP health expenditure imposes an extreme financial burden on households because the fees and cost of treatment is very high in private facilities and unaffordable for people with low income. OOP expenditure on health is one of the biggest reasons for people falling into poverty in India.

Impoverishing health status and vulnerable groups

The risk of severe complications from COVID-19 is higher for certain vulnerable populations, particularly people who are elderly, frail, or have multiple chronic conditions.⁷ The other vulnerable group is formed by the stranded, poor, daily workers as the ever-increasing health cost keeps pushing those just above the poverty line back into poverty. Migrant workers were one such major group in India, identified during COVID.

Excessive reliance on out-of-pocket payments leads to financial barriers for the less well off, and increased inequalities in access to health care, causing financial catastrophe or impoverishment. Estimates show that worldwide each year, around 100 million individuals are impoverished and 150 million face severe financial difficulties due to direct health expenditure and that more than 90% of such people affected live in low-income countries. Financing health care through such major out-of-pocket payments results in excessive health expenditure and impoverishment in many low incomes or developing countries, particularly India.²⁸

DISCUSSION

The current scenario of the stress on the health economy calls for mitigation strategies that focus on enhancing testing facilities, hospital support, and personal hygiene on a war footing. Specific R and D centres in the country should work to quickly create the best possible solutions for cure like vaccines, oral medicines, Ayurveda

substitutes, preventive kits, apart from focusing on producing hand sanitizers and masks. Also, the spread of COVID-19 can be slowed through improved screening programs, laboratory capacity, and disease surveillance program. Lastly, public and private infrastructure improvement can be a big step to improving access to life-saving health care through improved facilities.

On the above lines, the International bank for reconstruction and development proposed a loan of US\$ 1 billion to India for an emergency response and health systems preparedness project. Implementation of the same could be the one of the best solutions to address the current economic impact. The components and budgeting of the plan include- emergency COVID-19 response (indicative amount: US\$ 500 million), strengthening national and state health systems to support prevention and preparedness (indicative amount: US\$ 270 million), strengthening pandemic research and multi-sector, national institutions and platforms for one health (indicative amount: US\$ 100 million, community engagement and risk communication (indicative amount: US\$70 million), implementation management, capacity building, monitoring and evaluation (indicative amount US\$60 million), contingent emergency response component (CERC) (US\$0 million): provision of immediate response to an eligible crisis or health emergency.

CONCLUSION

The entire world, including India, was taken by surprise and countries did not get any time for elaborate preparation to tackle this pandemic. This study presented a comprehensive analysis of the COVID-19 outbreak situation in India and its impact on the healthcare sector-the epicentre of the challenge. Stringent lockdown mechanisms taken to limit the spread, further burdened the economic flows in the country.

The Indian Government acted rapidly to allocate funds, resources and manpower to tide over this pandemic by increasing patient testing, isolation, medical treatment mechanisms and more. It tried to address the issue of the existing disparity in the country by announcing relief packages for the marginalized communities and covering costs under the National Ayushman Bharat Scheme and by directives to already existing insurance companies. New schemes were put in place for people to uptake insurance. Welfare of stranded, poor, daily workers needs to be addressed at more depth. Also, specific research centres in the country should work to quickly create the best possible solutions for cure like vaccines, oral medicines, Ayurveda substitutes, preventive kits, apart from focusing on producing hand sanitizers and masks.

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