COVID-19 AS A CATALYST FOR TELEHEALTH GROWTH IN INDIA: SOME INSIGHTS

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Abstract

Telehealth is being rapidly embraced to deal with the COVID-19 health crisis across the world. Despite being a biggest exporter of software services, India has not been a big adopter of telehealth. However, the COVID-19 pandemic has compelled the Indian government to assess the current assets and facilitate the establishment and use of telehealth throughout the country. Different telehealth initiatives are being undertaken in the existing public and private healthcare institutions and patients are increasingly embracing the services. We briefly highlight the potential role played by the start-ups in addressing the challenges.

Keywords: Corona virus; COVID-19; India; health system; telemedicine; telehealth

Coronavirus disease 2019 (COVID-19) has severely affected the health system, disrupted the service delivery process, and created a healthcare crisis around the globe. As of 27 October, 2020, there were more than 10 million COVID-19 cases recorded globally, including 1.16 million deaths.[1] The sharp rise in cases has created fear and panic among ordinary people anxious to visit clinics for a consultation. Chronic patients are worried about their routine check-ups. Inadequacies in healthcare services have caused governments, clinicians, and patients across the globe to think about alternative solutions. Many countries have moved towards telehealth technologies to offer possible medical solutions.[2-4] The World Health Organization (WHO) is continuously encouraging telehealth adoption and ways to scale up. It has recently launched the WHO Academy and WHO Info app to support healthcare workers and the general public to get relevant healthcare information during COVID-19.[5]

The American Telemedicine Association has highlighted the benefits of telehealth, including better access, cost reduction, 24/7 coverage, and satisfactory value for consumers, providers, and payers.[6] As the COVID-19 pandemic evolved, the USA, United Kingdom, and Australian governments rapidly expanded telehealth technologies to handle the unprecedented healthcare crisis. In response to the COVID-19 emergency, the federal government in the USA relaxed several regulations and laws associated with telemedicine to improve access to healthcare.[7] In the UK, telehealth, especially video consultations, have been scaled up to render medical services

and reduce the risk of transmission.[8] The Australian government has introduced new Medicare Benefits Schedule telehealth items that help to diminish the risk of COVID-19 community transmission and furnish protection for patients and clinicians.[9] In France, a national health insurance reimbursement facility has been initiated by the government for telehealth consultation of COVID-19 related symptoms throughout the country.[10] Most developed countries have strengthened their telehealth capability and used it to spread care to all patients.

The increased use of telemedicine has enabled the developed world to handle the healthcare crisis. Likewise, the COVID-19 pandemic has brought a paradigm shift in various developing world countries' healthcare systems. Despite the lack of adequate and robust regulatory environments and inadequate resources, their healthcare systems have adopted telehealth technologies.[11,12] Similarly, this pandemic is a call for India to upgrade the healthcare system for its 1.3 billion people. As of 27 October 2020, there were more than 7.9 million COVID-19 cases, and 119 thousand deaths in India, with a daily increase of 20,000 cases.[13]

As a developing country, India is one of the largest exporters of IT and plays a major role in the global economy.[14] Besides the robust IT infrastructure, telehealth has not gained recognition and traction among clinicians and patients, predominantly due to inadequate regulatory support, and prohibition of practices. In 2001, the Indian Space Research Organization and the Apollo hospital group established a telehealth network in Aragonda village in Andhra Pradesh, India.[15] However, the initiative was not as

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productive as expected due to lack of Government support. In 2005, the Health Ministry, Government of India, set up 'National Telemedicine Task Force'.[16] Besides this, a few telemedicine services were initiated by various existing state government healthcare facilities such as School of Telemedicine and Biomedical Informatics-Sanjay Gandhi Postgraduate Institute of Medical Sciences, the Regional cancer center Trivandrum, and the Sri Ganga Ram Hospital Delhi. Various private players also set up telemedicine facilities including Amrita Institute of Medical Sciences, Aravind Eye Care, Asia Heart Foundation, Escorts Heart Institute, Narayana Hrudayalaya, and so on.[17]

The uptake of the telehealth technologies is slow as various state medical councils have restricted telehealth as a way of healthcare service delivery. As a result, the supporting ecosystem has also not evolved adequately. But the COVID-19 Pandemic has compelled the Indian government to acknowledge the limitation of the existing resources and the increasing demand for telehealth throughout the country. The Ministry of Health and Family Welfare in collaboration with NITI Aayog, has issued an amendment to the Indian Medical Council Regulations of 2002, that permits clinicians to consult through telehealth.[18] Besides, the Government of India's initiative eSanjeevani, a portal for telemedicine, has launched a smartphone app that connects the patients with government doctors digitally, which is already used by more than 24 states in India.[19]

In addition, the Government of India has introduced Telemedicine Practice Guidelines in March 2020.[20] The guidelines enable registered medical practitioners to use synchronous and asynchronous technologies and methods for consultation for diagnosis, treatment, health education or counselling, and follow-up. The prescription of habit-forming narcotic or psychotropic drugs by telemedicine is prohibited. The National Informatics Centre, under the Ministry of Electronics and Information Technology India, has developed the open-source Aarogya Setu app for COVID-19 tracking, syndromic mapping, self-assessment, and remote consultation. This intervention has helped the government to monitor the worsening healthcare situation through contact tracing.[21] The government has also run several digital campaigns to share the effectiveness of these technologies throughout the country and made it compulsory to use this app to access services like the public transport systems, and COVID symptom testing. The Ministry of Science and Technology, through the Centre for Cellular and Molecular Platforms (C-CAMP), initiated the C-CAMP COVID-19 Innovations and Deployment Accelerator (C-CIDA) on 26 March 2020, to help support 30 selected health-tech start-ups from more than 1,000 proposals, to find innovative ways of curbing infection rates.[22,23]

To date, various telehealth initiatives have been observed in public and private healthcare organisations in India. In response to COVID-19, the All India Institute of Medical Science has launched a 24/7 telehealth hub to provide real-time assistance to doctors using simple mobile technology. With the different initiatives and projects, Apollo telehealth established free COVID-19 teleconsultations at over 150,000 primary health centres across the country through the Digital India Initiative. Government initiatives drive healthcare providers, both private and public, to switch to telehealth technologies. Recent evidence indicates that healthcare practitioners are adopting the systems.[24–26]

The COVID-19 pandemic has pushed patients to visit clinicians virtually and altered their expectation of a standard face to face consultation. Efforts by the providers, in strengthening transparency while delivering services, and the government's intervention have built sufficient trust among the patients to switch towards telehealth technologies. Indian healthcare consumers are gradually accepting the various telehealth services, such as telephonic or video consultation, electronic health records, remote monitoring, and online pharmaceutical services.[27–29]

With the rapid evolution of the telehealth system, new challenges confront healthcare policymakers. India is a lower-middle-income country, where 70% of healthcare expenses are covered by individuals' out of pocket expenditure. This pushes many people below the poverty threshold every year. India spent around 3.6% of the total GDP on healthcare in 2019.[30,31] This leads us to ask important questions like who will pay for telehealth services? Also, nearly two-thirds of people live in rural India,[32] where telecommunication and network infrastructure is inadequate for the telehealth services. How can technological lag and resource deficiencies be addressed?

There is a possibility that innovative high-tech entrepreneurship or start-ups can address the above questions. Alternative business models like access-for-free-but-see-advertisement like Facebook or Google or like budget telecom models can be explored. Shifting the onus of ownership to external partners to provide services like Uber and recovering cost of hardware from the services over a long period of time by selling bundled services are other alternatives. A conducive regulatory environment and ecosystem to flourish start-ups can easily fill the gaps mentioned above.[33]

The COVID-19 mortality rate in India is increasing,[34] and telehealth has been facilitating access to care, including primary healthcare, and reducing the risk of infection. We believe that after the COVID-19 pandemic has resolved, people will experience a new way of life and gradually become more accustomed to telehealth services. There is a huge potential for start-ups to address the challenges. This will represent a new era for the Indian healthcare system and will also influence other developing countries to adopt telehealth technologies more widely.

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