Short Communication

Telemedicine during COVID-19: India embracing the change

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ABSTRACT

Telemedicine has been around for decades but it has taken foreground in health services recently. When COVID-19 cases started to be reported in the country it brought with itself panic and chaos. At all India level, the adult literacy rate is 77.7%, this could also be linked to unawareness related to the disease in rural areas. The sudden countrywide lockdown imposed was of no help and further worsened the situation for economically weaker section of the society. During the struggle of our nation to overcome the COVID-19 Telemedicine has indeed played a vital role. People in fear of contacting the disease and due to nationwide lockdown were unable to reach their health care provider. People with pre-existing conditions that needs regular monitoring, pregnancy related queries, queries on new symptoms, psychological counselling and many more could not wait for the COVID-19 to be over before they get any help on the issues. Telemedicine shall continue developing and be used in a multitude of settings by more health-care doctors and patients, and these standards of practice will be a crucial driver within this evolution.

1. Introduction

WHO defines telemedicine as, "the delivery of healthcare services, where distance is a critical factor, by all healthcare professionals using information and communication technologies for the exchange of valid information for the diagnosis, treatment and prevention of disease and injuries, research and evaluation, and for the continuing education of healthcare providers, all in the interests of advancing the health of individuals and their communities". [1]

Telemedicine is for those patients in the treatment of whom distance is the key factor. It includes examination, evaluation, diagnosis and consultation. It eliminates the need of in-person visit. It makes the best consultants available to you at your electronic communication device from the ease of your home. [2,3]

2. History of Telemedicine in India

The Telemedicine Pilot Project 2001 was a humble beginning for telemedicine brought forth by ISRO (Indian Space Research Organization). The project linked Chennai's Apollo Hospital and the Apollo Rural Hospital at Aragonda, Chittoor district of Andhra Pradesh. Initiatives taken by ISRO, Department of Information Technology (DIT), Ministry of External Affairs, Ministry of Health and Family Welfare and the state governments have played a crucial part in the development of telemedicine services in India. [4]

In an effort to combine the existing public health data as well as to impart easy access, the Ministry of Health of Indian government has taken up projects like Integrated Disease Surveillance Project (IDSP), National Cancer Network (ONCONET), National Rural Telemedicine Network, National Medical College Network and the Digital Medical Library Network. Standardized guidelines for the practice of telemedicine in India were

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setup by the Department of Information Technology in the Government of India, and setting up of a National Telemedicine Task Force by the Health Ministry, in 2005, were some other primitive decisions in the direction by Indian government. International projects like the Pan-African eNetwork Project and the SAARC (South Asian Association for Regional Co-operation) Telemedicine Network Projects have also been taken up as an initiative of the External Affairs Ministry, strategically placing Indian telemedicine in the global scenario.[5]

3. Advantages of Telemedicine

During the testing times of COVID-19 one of the greatest advantage of telemedicine in India is that it eliminated the in person visit to a health care facility, hence greatly reducing the chances of contracting of contracting any new disease or COVID-19 itself. By eliminating the risk of exposure, the chances of spreading the disease ourselves is also eliminated specially in case of COVID-19 which is highly transmissible.

It also saves time, money and energy by cutting down the time of travel, travel expenses and tiredness of long journey which would otherwise have been unavoidable.

The daily hustle bustle of modern-day life, responsibilities and prior commitments, work overload have all made it very difficult to find adequate amount of time to devote for our healthcare visits especially if the visits are to be frequent. Telemedicine provides options of selecting the desired time slots according to one's convenience.

People living in places that do not have easy access to super speciality hospitals can have the best health care advices and treatments possible through telemedicine. The primary health care provider can help connect a patient to a specialist. When it comes to health anyone would choose the best over the closest.

When one can have appointments as easily as one wants to and whenever in need, it in return helps in better health management, medication regulation, better health related lifestyle choices and better care of chronic illnesses.

Telemedicine not only helps in making life easy it is also convenient and less time consuming.[6,7]

4. Drawbacks of Telemedicine

It is not always possible to form a diagnosis or prescribe treatment without hands on approach. Many a times different tests like imaging tests, serological examinations require the patient to be physically present.

The patients' health records are confidential. Maintaining privacy of data and its secure storage is a major concern involved in telehealth. The security and privacy of the patient-clinician relationship, its intimacy and confidentiality, are in question in the telehealth delivery system.

Though insurance companies have started to cover expenses of telemedicine, telemedicine is still a new concept and many of the expenses may not have been included under insurance coverage which may lead to more expenses.[8]

5. Telemedicine during COVID-19

Telemedicine services in India was introduced on 9th August 2020. It was named eSanjeevani. It was a part of the initiative 'Digital India'. With the ongoing pandemic it helped medical practitioners to use tele communication tools like video conferencing to provide better health services at diverse locations throughout the country. The programme as for now allows two types of telehealth services: 1. Doctor to Doctor which is known as eSanjeevani. 2. Patient to doctor which is known as eSanjeevani OPD. The provided services constitute a part of a bigger scheme of Government which connects larger healthcare centres to smaller health facilities in distant areas. With its expansion, medical college and hospitals along with large hospitals of government in the States would act as 'hubs' which will be providing telehealth services to 'spokes', or primary health care centres (a "hub and spoke" model). India has relied on this model for providing non-COVID essential healthcare, with approximately 3 million consultations on the eSanjeevani platform as on 17 March 2021.[9]

Though telemedicine was not a new term for India its implementation was not done on a large scale. The practice was out of focus and enough attention was not paid to it until the pandemic. The earlier attempts did not gather much positive response. It was not until the March of 2020 when guidelines were issued by the Government of India that made Telemedicine legal. The public was not very confident about the Telemedicine consultation as top court of Maharashtra Government upheld the charge of Criminal Negligence against a consultant, who adviced a patient over Tele mode and the patient lost her life.[10]

6. Ethical Consideration

Telehealth shoves the periphery of justice, informed consent, many professional regulatory domains and provider competencies. To start with, tele-consultation users may not have acquaintance with technology in use and may not be comfortable with technical aspects of telemedicine. This may be a hindrance as there is high chances of miscommunication, misinterpretation and partial examination of a patient who is inexperienced. As a result, telehealth challenges "what 'informed' consent means when new technologies require education about benefits and burdens associated with their use." This is significantly true when the user of the technology, the user or the provider or both, have little understanding of it. It is critical that

the patient has been informed and it has been made sure that the patient understands the scope of telemedicine. It is important that the person is well informed about both the positive side and drawbacks of the telemedicine.[8]

Although these technological advances may have contributed in improvement of communication of the medical issue and its symptoms via various communication methods like video conferencing with the help of devices like laptops and smartphones which utilize high speed internet, it may not provide the benefits to those who cannot use such medium.

Telehealth technology also highlights the fact that a skilled communicator is required for such consultations because of limited visual cues. During the training for such consultations it is very important to emphasis on communication competencies of the provider. Providers being able to interact patients in diverse geographical locations and distant regions, cultural competency too has peculiar relevance.[11,12]

7. Conclusion

Telemedicine shall continue developing and be used in a multitude of settings by more health-care doctors and patients, and these standards of practice will be a crucial driver within this evolution. To protect the rights of all persons and guarantee that variations in literacy, linguistic, geographical region, physical and mental capacity, age, and gender do not lead to the alienation of treatment, telemedicine must be administered fairly and to the highest standards of ethics. Telemedicine, on the other hand, cannot solve every problem and cannot substitute in-person consultations. The relevance of telemedicine in healthcare delivery and how it will be adopted in the future has been highlighted by this catastrophe. In India, the benefits of investing in telemedicine are numerous, and its usage might make healthcare more affordable and fairer in the long term. As a corollary, policymakers and healthcare professionals should be aware of the benefits of giving treatment via virtual mode in this digitalized environment, and should stimulate the rapid formulation of regulations and standards on the topic to assist the efficient use of telemedicine. The use of visual aids and video conferencing can assist more in smoothening the process of diagnosis. With the upcoming uncertainties telemedicine has proved to be a game changer. If any future pandemic follows we are now technologically and strategically more equipped. Not only during pandemic but in day to day life it is now becoming easier to consult a specialist without compromising time, schedule and comfort. Telemedicine has a bright future in India.

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9. Conflict of Interest

No conflict of interest associated with this work.

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