# **Telemedicine: A Link between Analysis, Remedy and Health**

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#### Abstract

With the advancement of today's modern communication, telemedicine has likely found its way into the healthcare system. Telemedicine can wear off the excessive and compulsive need of an expert provider to be present at the place of care. It helps the patients to avail the medical advice at a preferable time from an expert of his/her condition. Telemedicine bridges the gap between the patient and physician without the need of being in the physical presence of each other. A person who stays in the remotest corner of the village having just a mobile phone can consult a doctor all over the world. It could not just be used by the villager but the person who stays at home can even solve their queries using this media platform. Telemedicine help doctors to attend a g reater n umber o f p atients i n l ess t ime a lso the investment in huge infrastructure and space is reduced.

Keywords: Telemedicine; Analysis; Remedy; Health

#### Introduction

Telemedicine helps the exchange of medicinal or therapeutic knowledge and information to discuss a case among doctors to reach a prognostic clinical management and treatment.

To make it a scope for people in the remote areas where there are less health care centres, telemedicine proves its rationale to provide healthcare clinical advice using electronic telecommunication systems.

Here, the patients can consult a desired healthcare physician immediately, without spending on the expenses of transport.

The resident doctors can also discuss a critical case with the specialized doctor and the patient do not need to wander from one clinic to other which increases the efficacy of the treatment which ultimately help to achieve good prognosis in patients. [1]

When the patient, as well as the doctor, is unable to be physically present, telemedicine helps in management of the disease in terms of online consultation, video calls, video conference, SMS, phone calls, emails etc.

In this paper, we are discussing how the need for telemedicine has arisen and how it is implemented. Like every other phenomenon telemedicine also has its advantages and disadvantages. This paper will throw a light on both these aspects.

Telemedicine is often replaced by the word telehealth. These two concepts are closely related and are often used interchangeably. Telemedicine refers to remote clinical services like diagnosis and monitoring. Telehealth, on the other hand, refers to preventive, promotive, care delivery, provider education, etc.

The world is under the grasp of a deadly pandemic. The culprit is such that it cannot be seen by the naked eye and spotted before it proves harmful. It has stopped all the daily functions; it has created a new normal way of life. A lot of patients both in urban and rural areas are thus, not able to avail the right healthcare facilities in these times. Apart from this, many a time, patients need to avail the services of healthcare providers from different locations. At times patients have to travel for trivial reasons which add to the discomfort caused to the patient. Such situations are right for the advent of telemedicine. Telehealth has been proven useful in matters of consultation, monitoring, education, advice, etc.

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**How to cite this article:** Bhairavi M, Samiksha S, Sachin C, Shailesh P, Ranjit A and Nandkishor B. Telemedicine: A Link between Analysis, Remedy and Health . AMHSR. 2021;11:

#### **Patient Situation**

There are cases where the patient situation is such that there is no one to carry them to the hospital facility because of their condition. Such patients can avail the help of telemedicine services. Through telemedicine, they can either get consultations on the video/audio conferencing platforms or arrange for facilities from the hospital where they can get home visits or transport arrangement to the hospital and back. Also, due to the frequent lockdowns and COVID situation, a lot of patients needing physiotherapy are not able to visit the clinics. Sometimes one provider might need to get some advice from an expert to treat his/her patient. In such a situation the doctor can arrange a three way conference for the expert, patient, and himself so that the treatment goes in the best possible direction. [3]

# **COVID Patients**

Physiotherapy has been proven useful in the cure and rehabilitation of patients suffering from COVID-19. To break the virus chain and keep the caregivers safe, it is important that the contact between the infected patients and the caregivers is minimal. Telemedicine is a way to highest efficiency in this scenario. [2]

## **Discussion**

Telemedicine and telehealth make sure that the patient gets the best possible care. It makes sure that patient is able to receive the best possible health care with the help of the physician on the other side of the phone or screen. Many times, experts consult with surgeons on difficult surgeries and help them perform critical procedures without the need of actually being there. The travel stress and exhaustion reduce for the experts and a greater number of patients avail their expertise. [4-6]

If the telemedicine infrastructure is well invested in, then the doctors and nurses can easily avail the patient demographics, history, and other relevant things, which in turn will help them treat the patient better.

Though telemedicine is very useful, the major concern in it arises due to the need for robust infrastructure and basic knowledge of the usage of the system. Many a time the patients are old, illiterate, or do not, altogether, have the access to the devices needed in this process. This can create a major hurdle in the use of telemedicine technology.

The other major hurdle is cost. Most devices are costly for implementation in smaller healthcare facilities. This discourages the hospital management to weigh the importance of telemedicine. Also, some illnesses require a face to face interaction between the physician and the patient. Certain things in the diagnostics procedure and clinical examinations require feeling the patient's skin, colour, palpation, and texture. These things are difficult to be done when using telemedicine. [6,7]

The personal connection that happens between the caregiver and patient is also absent in the case of telemedicine. But the advantages are far too many to ignore this idea.

The best way to implement the telemedicine and telehealth infrastructure is by giving basic training to the physicians and nurses during the schooling. The patients and their family members, close friends, roommates should also be educated about the usage of the technology. Also, IT professionals should make sure that the User Interface (UI) is as user friendly and accessible as possible. Security measures should also be considered so that the patient data is not compromised. [6,7]

The advent of newer communication technologies and the internet has seen a boom in all the possible industries. The more this will be accepted in healthcare the better care can be provided to the patients. In physiotherapy, most patients are going through rehabilitation after critical surgeries, accidents, and injuries. <sup>[8,9]</sup> The patients have to visit the facilities even when it is a very uncomfortable and traumatic experience for them. Some patients choose not to go through physiotherapy altogether because they do not have aid to bring them to the facilities. Telemedicine can help such patients to a great extent. <sup>[10-13]</sup> The need of telehealth is evident from a number of global burden of disease studies. <sup>[14-17]</sup> Some of the related studies were reviewed. <sup>[18-20]</sup> The physicians can give online consultations to such patients which will make sure both the provider and the patient are in benefit. <sup>[8,10]</sup>

## Conclusion

Telemedicine is a boon in these COVID times. In a time where we are losing a lot of patients and doctors to the deadly coronavirus, this technology ensures minimal possible contact and is helpful in breaking the virus chain. Therefore, authorities should invest in the technology and reap the benefits before losing unnecessary patient and caregiver lives.

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