Telemedicine - A boon in corona crisis.

Shravani Pohane¹, Madhulika D Tiwari^{2*}, Shubhada Gade³, Dattu Hawale⁴, Lalit B Damahe⁵

¹Third Year BAMS Student, Datta Meghe Ayurved College, Hospital & Research Centre, Wanadongri, Nagpur, India

²Department of Rachana Sharir, Datta Meghe Ayurved College, Hospital & Research Centre, Wanadongri, Nagpur, India

³Professor and Head of the Department of Physiology, Datta Meghe Medical College, Shalinitai Meghe Hospital and Research Centre, Nagpur, India

⁴Tutor Department of Biochemistry, Jawaharlal Nehru Medical College, Datta Meghe Institute of Medical Sciences Sawangi (Meghe) Wardha, India

⁵Computer Science and Engineering Assistant Professor, Yeshwantrao Chavan College of Engineering, Nagpur, India

Abstract

Introduction: During Covid-19 pandemic, Telemedicine is helping in reducing the burden on tertiary hospital by providing diagnosis & treatment to patient in their own geographical location & reducing chances of patient's exposure to hospital visit. Subjective: It includes a subjective definition of Telemedicine, what components are required to establish this technique. Aim: Aim of this research article is to study the role of Telehealth services and how it is being used in context of Covid-19. Material &Methods: -Different articles related to the topic and material available on internet. Observation: A successful practice of implementation of Telemedicine which proves how it acts as boon in these pandemics. Discussion: Telemedicine is acting as a bridge for the gap between people, medical specialists, and health-care delivery systems thus allowing everyone, particularly those patients with symptoms, to stay at home and communicate with experts via virtual platforms, consequently reducing the spread of virus in large populations and health professionals working on the forefront. Conclusion: Telemedicine provides a lifeline for patients to connect with their health care provider 24 hours a day, round the clock in all days in a week. This provides tremendous comfort and assurance to the people while also assisting in the monitoring of the patient of home isolation during these hard moments.

Keywords: Corona, Covid-19 pandemic, Telemedicine, Healing at a distance.

Introduction

In the midst of Covid-19, when the globe is at a loss as to how to combat the Coronavirus pandemic, which has left millions diseased and hundreds of thousands dead and dying, Telemedicine is proving to be a benefit to this society! As the Corona virus continues to create havoc on our medical system, telemedicine is emerging up to help healthcare practitioners and providers a better chance to react to the growing needs of patients afflicted with the virus.

At the time of this global crisis, telehealth is proving to be a feasible and indelible solution for preventive and therapeutic management of Covid-19. Using telemedicine, we can improvise the access for patients to high-quality, economical care along with maintaining the norms of social distancing for both patients and caregivers' safety during the current pandemic. Along with the virtual visits, use of text messages,

emails, applications on mobile together with the information from recent wearable devices for interaction between patients and physicians can be done.

In the midst of the present pandemic, technology is fast evolving, and the demand for Telemedicine services is growing. As a global country, India's government and state regulatory bodies must quickly adjust to the growing need for telemedicine in order to sustain the country's ability to supply the six essential aspects of human health. It is a great opportunity for India, and policy for telemedicine must change faster than ever during the COVID-19 epidemic. For the blemish of world due to current pandemic, health sector has been forced to increase their utilization of telehealth modules in place of traditional face-to-face interaction with patient. Here, in this article, our aim is to discuss the utilization of telemedicine during the scenario of on-going COVID pandemic.

*Correspondence to: Madhulika D Tiwari, Department of Rachana Sharir, Datta Meghe Ayurved College, Hospital & Research Centre Nagpur, India, E-mail: tmadhulika88@gmail. com

Received: 01-Mar-2022, Manuscript No. AABPS-22-57694; Editor assigned: 03- Mar-2022, Pre QC No. AABPS-22-57694(PQ); Reviewed: 17-Mar-2022, QC No. AABPS-22-57694; Revised: 19-Mar-2022, Manuscript No. AABPS-22-57694(R); Published: 26-Mar-2022, DOI:10.35841/2249-622X.87.112

Citation: Pohane S, Tiwari MD, Gade S, et al. Telemedicine - A boon in corona crisis. Asian J Biomed Pharmaceut Sci. 2022;12(87):112

Subjective

Why Telemedicine: Telemedicine is a term that was coined in the 1970s and which means "healing at a distance". According to World Health Organization, "Telemedicine involves the use of electronic communications and software to provide clinical services to patients without an in-person visit" [1].

Investing in telemedicine might involve anything from video implements to provide distant consultation to telemedicine carts for conducting examination with hospitalized patients externally to their room. Technical requirements for this approach include hardware, software, communication, capture, storage, retrieval, and presentation, while health care providers must be directed and trained.

Aim

To Study the role of Telemedicine being used in context of Covid-19 outbreak

Methodology

There are three crucial roles for technologies in sector of telehealth during the current predicament:

- The primary is straightforward: instead of having patients attend the practice or hospital, they may be screened remotely.
- They can be used to prioritize patients having symptoms of cold and flu, as well as remote care for individuals who do not require medical intervention or can be cared for at home.
- By keeping possibly infectious people out of the hospital& doctor's office, the healthcare system can reduce the danger of infection spreading to other patients and healthcare workers [2].

The subsequent role of telemedicine during a prevalent pandemic is sometimes missed:

- Assisting in the provision of normal treatment for patients with long-standing or incurable diseases who are precarious on exposure to the virus.
- As we all know, Covid-19 may be highly dangerous and even lethal for those with weakened health, and by using video-conferencing, clinicians can aid such patients while minimizing corona virus contact.

The tertiary function is paradoxical but equally critical:

- Caregivers and its staffs are not resistant to infection and are all at higher possibility of acquiring Covid-19 owing to constant contact with sick patients.
- Once assessed and verified, these caregivers will be in quarantine and rendered inaccessible to the medical management system, the minute when it is needed most.

Observation

A successful practice of implementation of Telemedicine is reported in a city of Maharashtra state, India. With the help of Nagar Paris had, doctors from above cited address created a what's-app group & prepared a 'Corona Medicine Kit' having course of 5 days, which includes the basic medicine (like medicine for fewer, cough, cold & flu, painkillers, multivitamins) on behalf of early symptoms of Covid-19. When patient tested positive or showing any symptoms regarding to Covid-19, they immediately get home isolated & contact to Nagar Paris had, and scheduled tele consultation with doctors, provided with 'Corona Medicine Kit' which delivers to patient home by Asha workers or frontline workers [3,4]. Every day, an online session of video call is scheduled between patient & physician, so that all details regarding to health of patient is observed. If no progress observed or patient gets serious then patient is immediately shifted to hospital. But, about 80-85% of cases reported who successfully recovered at home. Thus, by implementation of Telehealth, a successful practice is observed to minimize the caseloads. This is how; one step towards the Telemedicine is acting as boon in this pandemic [5].

Discussion

Telemedicine is thus helping to bridge the gap between both sides of health systems, allowing everyone, especially symptomatic patients, to stay indoors and interact with physician via virtual platforms, thus helping to reduce the spread of virus amongst mass population & medical staff or frontlines workers.

Hospitals are swiftly using the medication to treat Covid-19infected quarantine patients. Those who are suffering from other medical issues during this current pandemic period can obtain consultation from home without accessing medical facilities, consequently reducing the chances of contracting the virus [6,7].

Risk to children is more in these days, so, the pediatricians are planning for medication or diet on children on the basis of the video calls, videos of the movements, activities & growth of children captured by their parents. In addition, many chronic patients have arranged tele consultations from their homes in order to avoid one-to-one clinic appointments which therefore reduce their risk of vulnerability to Covid-19.

Beyond simplifying triage, the use of telemedicine has had a beneficial influence on the public health emergency by allowing the quick deployment of large numbers of healthcare providers and the provision of services when local hospitals and healthcare facilities cannot meet the demand. During, this infectious pandemic, telemedicine has been used to provide healthcare information not just to affected persons but also to non-infected people. The growing use has sparked debate about incorporating telemedicine into healthcare provider certification, paying for telemedicine, and rethinking clinical care models, among other things [8,9].

Conclusion

On the basis of observations and findings it can be concluded that Telemedicine perfect solution for conveying Covid-19 that it won't make sense not to use it. Clinicians and patients have been highly advised to use Telemedicine technologies as a viable alternative for preventing and controlling Covid-19

Citation: Pohane S, Tiwari MD, Gade S, et al. Telemedicine - A boon in corona crisis. Asian J Biomed Pharmaceut Sci. 2022;12(87):112

infection. A huge number of hospitals have already stared to focus on structured format and expansion of their Telehealth services for better assistance of patients in middle of this crisis.

References

- 1. Ganapathy KN. Apollo Hospitals, Chennai, Telemedicine in India-the Apollo experience. Neurosurgery on the Web. 2001.
- 2. Sharma S. Towards high quality and flexible future internet architectures (Doctoral dissertation, Ghent University).
- 3. Turabieh H, Salem AA, Abu-El-Rub N. Dynamic L-RNN recovery of missing data in IoMT applications. Future Generation Comp Syst. 2018;89:575-83.
- 4. Kilic A. Artificial intelligence and machine learning in cardiovascular health care. The Annals of thoracic surgery. 2020;109(5):1323-29.
- 5. Brown N. Telemedicine coming of age. TIE: September. 1996;28.

- 6. World Health Organization. Telemedicine: opportunities and developments in member states. Report on the second global survey on eHealth. World Health Organization; 2010.
- Rachakonda L, Bapatla AK, Mohanty SP, et al. SaYoPillow: A Blockchain-Enabled, Privacy-Assured Framework for Stress Detection, Prediction and Control Considering Sleeping Habits in the IoMT. arXiv preprint arXiv:2007.07377. 2020.
- 8. Ma H, Gao Y, Kavehei O, Ranasinghe DC. A PUF sensor: Securing physical measurements. In2017 IEEE International Conference on Pervasive Computing and Communications Workshops (PerCom Workshops) 2017;648-653.
- 9. Mitragotri S, Burke PA, Langer R. Overcoming The Challenges in Administering Biopharmaceuticals: Formulation And Delivery Strategies. Nat Rev Drug Discov. 2014;13(9):655-72.

Citation: Pohane S, Tiwari MD, Gade S, et al. Telemedicine - A boon in corona crisis. Asian J Biomed Pharmaceut Sci. 2022;12(87):112