Case Report

A case study: emerging role of telehealth and local health practitioners during COVID-19 pandemic

Absar Husain¹*, Ajoke Akinola¹, S. M. Akhtar²

1Department of Public Health, Noida International University, Gautam Budh Nagar, Uttar Pradesh, India
2NHM Hospital, Hoshangabad, Madhya Pradesh, India

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*Correspondence:
Mr. Absar Husain,
E-mail: abscell30@gmail.com

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ABSTRACT

This case study investigates the experiences of planning and strategies to respond to a medical emergency and healthcare delivery during the COVID-19 pandemic, the local health practitioners from rural and urban areas of northern India; we included the experiences of telemedicine among the practitioners of Allopathic medicine System, Indian medicine System, and Allied health services. The case study recorded descriptive telephonic interviews about the situation, task, and action towards telehealth. The 35 respondents from Uttar Pradesh, Madhya Pradesh, Delhi, and Rajasthan. Find the results approximately 10-90% of telehealth services increase in clinical and non-clinical facilities. Approximately 95% of healthcare providers adapted telehealth delivery in the pandemic situation. The observation of preparedness in telehealth services and continued effort to address the situation by local health care providers. The status of real-time response to the prevention and control of new incidents. The role of telehealth setting in COVID-19, situation disembarrass through Voice call, text message, picture/video message, and all other possible measures were employed to accumulate maximum clinical information in real-time.

Keywords: Telemedicine, Health emergency, COVID-19 situation, Health care providers

INTRODUCTION

Impact of coronavirus pandemic on medical services conveyance in India and the remainder of the world, the requirement for a versatile methodology of medical care specialist to new difficulties of telemedicine/telehealth. At first face the trouble of offering types of assistance through telephonic counsel just as virtual, a dedicative key job of nearby professional individual and aggregate exertion at neighborhood and public level. During the pandemic, our economy, society, and healthcare system developed a new strange to sustain the work of progressive planning. It has rapid adoption of telehealth and transformed healthcare delivery at a breathtaking pace. The expression "telehealth" is mention to the whole range of exercises used to convey care a way off, without direct actual contact with the patient. Telehealth incorporates both enterprises to-patient and enterprises to enterprises correspondences and can occur simultaneously (phone and video), none concurrently (persistent entrance messages, E-Consults), and through virtual specialists (chatbots) and wearable gadgets.¹ The high likelihood of a world depression and the differential responses across countries especially those of China and the US is changing the existing distribution of power across the world. The Tele-ICU approach is easily extended to the non-ICU setting, particularly for physician to physician communication and care of patients in isolation. An additional component in the Tele-ICU approach permits clinical learners, who have been generally taken out from clinical experiences as a result of COVID-19, to take an interest and backing clinical staff, including inpatient rounds or outpatient encounters. The growth of Telehealth in urban and semi-urban areas currently fastest in the hospital care and primary public health planning. Much of this growth is attributable to the
benefits of telehealth, including shorter wait times, avoidance of travel, and fewer missed appointments. In addition, patients report better provider communication and access, better medication adherence, and overall high satisfaction scores with telehealth services outcomes. The use in primary care by local health providers for health and unhealthy populations, for the communication between population and health care provider in radiology, diagnostic palliative care, pharmacy, registration for new patient, repeat treatment. Communication physician to physician and supportive department, a remote care implementation in health care setting.\textsuperscript{2} Telehealth minimizes the risk of transmission, mortality, and morbidity rate provided care in urgent health issues with social distancing. The need of face to face visits merits cautious thought and gives reason and chance to deliver care through telehealth when suitable.

**CASE REPORT**

We have recorded interviews conducted on mobile phones and also of virtual meetings, a brief discussion about situation, task and action towards telehealth service. We connected 35 respondent’s different health care department, medical and allied health. We connected with respondents on the scheduled time allotted. Interviews from Uttar Pradesh, Madhya Pradesh, Delhi and Rajasthan.

We found the data as, approximately 10-90\% of telehealth services increased in clinical and non-clinical facilities. Approximately 95\% of healthcare providers adapted telehealth delivery in the pandemic situation.

In our study, person reported with emergency health problem or non-emergency condition, routine checkups, appointment date and time cover by physicians as well as forthcoming appointments were takeover through telehealth planning. In case of urgent diagnostics such as home sample collection with follow up telehealth team was planned. Treatments based on physician discretion with the daily update WhatsApp, Email, and other online appointment application (OAA), for weekly and second-day visit patient, reminder through Google calendar or WhatsApp messages. Follow-up pharmacological treatment after 1 day or 1-week of the patient was provided with the digital prescription.\textsuperscript{1} Daily guidelines for emergency patients to monitoring vital signs and necessary updates by nursing staff, online or offline necessary visits. Physicians also prescribed substitutes to injectables therapies into oral dosage. Open injury and orthopedic treatment followed by home care with emergency medicine antipyretic drugs and antibiotic therapy. Risks and benefits of each treatment were explained as well as guidance on which subsets of patients may be benefited from certain treatments over others was studied.

The supportive team works to maintain the non-clinical activities during crisis COVID-19. Specifically, the IT department in the health system, proactively carried out patient’s engagement through telehealth non-clinical team helped healthcare system to effectively manage these contingencies. Telehealth services rapidly grew in hospital systems including non-clinical care. The network of telehealth during pandemic and post-pandemic transition system shifted from crisis mode to sustainable mode. The most direct methodology is to stretch out and operationalize the progressions to individuals, cycles, and advancements investigated in the initial two stages, foreseeing a supported more elevated level of telehealth administrations. Some schools, colleges, and universities conducted wellness classes for students by appointing mental health and another expert to improve health status. In primary health care, no clinical services faced difficult challenges comparatively to clinical services. At the end of the lockdown phase, non-clinical services evaluated into effective.

![Figure 1 (A and B): Telehealth OPD during COVID-19.](image-url)

The use of advanced technologies, lots of applications, and software created by technocrat for telehealth evolution was utilized.\textsuperscript{2} A combined care for repeated cases and new cases by virtual OPD system, use of new devices with connectivity mobile, tablets or PCs/Laptop, virtual monitoring (respiratory rate, heart rate) was adopted. The setup of video conferencing, easy to use video platform on desktop and mobile/tablet allowed to modify camera angle for VVE (vital virtual examination).

The implementation of a telehealth system with good connectivity of broadband internet connection was difficult for patients while using technology rather than a telephone. Poor and lack of adequate internet connectivity as well as improper equipment was a challenge for virtually treatments. When physicians fail to communicate
through video, they used the telephonic visit for delivering proper guidelines to patients and families (patient caretaker). The sufficient sources of technology with user trainings by IT experts to support telehealth inpatient care system was applied. The physicians were involved in learning new updated technology to deliver the services and also shared guidelines to the patients.

CONCLUSION

The COVID-19 pandemic has changed all healthcare systems, clinical care, and allied health care to rapidly implement telehealth services and delivery of patient care by local health practitioners. We are going on with the virtual age in this pandemic crisis, and the best use of telehealth to improving public health delivery at local health settings. telehealth can lower health-care costs and improve access to care, especially for patients in rural or underprivileged societies, the most essential healthcare services through telehealth effectiveness and lead to comprehensive care in the new role of virtual care has arrived.

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REFERENCES

1. Wosik J, Fudim M, Cameron B, Gellad ZF, Cho A, Phinney D, et al. Telehealth Transformation: COVID-19 and the rise of Virtual Care. Knee Surg Sports Traumatol Arthrosc. 2020;27(6):957-62.
2. Rao SS, Loeb AE, Amin RM, Golladay GJ, Levin AS, Thakkar SC. Establishing telemedicine in an academic total joint arthroplasty practice: needs and opportunities highlighted by the COVID-19 pandemic. Arthroplast Today. 2020;6(3):617-22.
3. Phua J, Weng L, Ling L, Egi M, Lim CM, Divatia JV, et al. Intensive care management of coronavirus disease 2019 (COVID-19): challenges and recommendations. The Lancet Respiratory Medicine. 2020;8:506-17.
4. Lakhani HV, Pillai SS, Zehra M, Sharma I, Sodhi K. Systematic review of clinical insights into novel coronavirus (CoVID-19) pandemic: Persisting challenges in US rural population. Int J Environ Res Public Health. 2020;17(12):4279.
5. Jackman D, Konkin J, Yonge O, Myrick F, Cockell J. Crisis and continuity: Rural health care students respond to the COVID-19 outbreak. Nurs educ pract. 2020;48:102892.
6. Enzmann MO, Erickson MP, Grindeland CJ, Lopez SM, Hoover SE, Leedahl DD. Treatment and preliminary outcomes of 150 acute care patients with COVID-19 in a rural health system in the Dakotas. Epidemiol Infect. 2020;148:124.
7. Chersich MF, Gray G, Fairlie L, Eichbaum Q, Mayhew S, Allwood B, et al. COVID-19 in Africa: care and protection for frontline healthcare workers. Global Health. 2020;16:1-6.
8. Dewey C, Hingle S, Goelz E, Linzer M. Supporting clinicians during the COVID-19 pandemic. Ann Intern Med. 2020;172(11):752-3.

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