Telehealth Consultation in the COVID-19 Era: Utilisation and Challenges of Virtual Platform

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INTRODUCTION

Telehealth consultation means exchange of medical information from one site to another through electronic communication to improve a patient's health. It utilises telecommunication technologies to support and promote distance health care, health administration and professional health-related educations. Over last few months, the world has been witnessing histories of human sufferings, overwhelmed health-care system as well as confinement of huge population in the wake of COVID-19 (Coronavirus Disease of 2019) pandemic¹. The well-being of health care workforce being the cornerstone of every well-functioning health-care system, proper strategy needs to be planned ahead to keep the frontlines physically and psychologically strong. There has been remarkably noted psychological distress among health-care workers as a result of tremendous patient work-load, information overload, sleep disturbances, risk of getting infected and putting their families at risk²⁻³. Telehealth consultation may bridge the gap between patient, physician and health care system allowing the mass population to communicate with physicians through virtual channels. It may also lead to reduce costs due to minimal utilisation of institutional resources including infection prevention measures.

Utilities of Telehealth Consultation in Pandemic

This service utilises an interactive audio-visual telecommunication system that permits real-time interaction between the health care provider at distant site and the patient at home. Technologies such as video conferencing, streaming media, file sharing via cloud etc. are at the forefront of different modalities used for telehealth consultation³. In terms of logistics, all it requires on each side are a smartphone or webcam enabled computer and a reliable internet connection. During pandemic, telehealth service can be utilised in the followings settings⁴⁻⁷:

- i) In the simplest and most trivial of cases, the simple conversation between the doctor and patient over phone might be enough for consultation.
- ii) If visual inspection is required, a virtual meeting through video conferencing can be arranged between the doctor staying at own office and the patient staying at home. It this setup, a patient with mild symptoms of any disease can minimise the risk of getting infected by avoiding face-to-face visit to the clinic, which might cause exposure to other infected patients.
- iii) For a more elaborate consultation requiring clinical setup, a live video conference between doctor and patient may serve the purpose where the doctor stays in the office and the patient undergoes initial triage at the emergency or out-patient department in the same clinical facility. This setup can minimise the risk of exposure to the health care worker during pandemic.
- iv) A remote health-monitoring system can be installed for COVID positive cases in order to minimise the duration of stay inside wards as well as exposure risk of health care professionals at the bedside.

- v) In a worst-case scenario of pandemic where a health-care worker is absent due to sickness or needs to be quarantined, the scheduled office-visit of a patient can be converted to telemedicine visit.
- vi) Sending investigation reports or other documents to the concerned physicians can be done over the internet also minimises the risk of passive infection.
- vii) The physician can use e-prescription software to ensure proper record keeping and quick delivery of prescription to the recipients.
- viii) Remote monitoring of recently discharged COVID patient might be a crucial step in containing the outbreak.
- ix) Remote training for healthcare providers on important topics including management of critically ill patients, practical demonstrations of basic skills, personal protection, infection prevention and control, psychological counselling etc. can strengthen the healthcare delivery system during ongoing pandemic.

Challenges of Telehealth Consultation

Telehealth has been a newly practicing platform in most of the healthcare facilities and by most of the users. Challenges of using telehealth consultation as a treatment option include⁸:

- i) Consent and Communication: There must be valid consent from the users if they wish to utilise telemedicine service. The service provider should maintain proper communication to confirm patient details prior to consultation.
- ii) Confidentiality: The patient must be reassured about the nature of remote consultation and that the conversation is secured and confidential. Professional norms must be practiced during consultation.

- iii) Limitation of Findings from Physical Examination: Consultation on virtual background lacks the findings of physical examination of a physician. In circumstances where remote consultations seem to be inconclusive, a face-to-face consultation should be organised to rule out any suspicion.
- iv) *Limitations of Expression:* Expressions of empathy, emotion and trust become virtual in remote consultation; hence communication skill need to be practiced carefully using text, voice or video.
- v) *Logistics and Internet Connectivity:* Since personal utilisation of telehealth consultation service requires proper device and internet support, telemedicine might not be always appropriate for a person with lower socio-economic status or technical know-how.

CONCLUSION

COVID-19 has made many sectors switch rapidly from traditional 'face-to-face' to virtual platform. Health care service is not an exception, telehealth consultation has moved to a brighter spot than ever due COVID-19 pandemic. However; health care systems need to develop a digital platform and coordinated network as well as training of users to make proper use of it. Gobal and national health care organisations need to adopt and strengthen telemedicine services to augment the efforts not only to extinguish COVID 19 pandemic, but also to prepare for any upcoming disaster. Nonetheless, a telehealth consultation is not meant for and will never fully substitute a face-to-face visit to physician, it lacks physical examination and inter-human transmission of non-verbal cues (Expression of empathy, trust and more). Acknowledging and accepting these limitations and challenges, establishment and utilisation of telehealth consultation can contribute to an essential component of pandemic control as well as serve the best interest of both patients and health workforce.

DISCLOSURE

Both the authors declared no competing interest.

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