EDITORIAL

e-Health in the time of COVID-19. The leap forward: hold onto it before it backslides!

Yasir Elfatih A. Elsanousi *

Division of Medical & Health Services, Alsabeel Charitable Health Center (SCHC), Omdurman, Sudan.

Abstract

The COVID 19 pandemic has greatly contributed to the surge of e-health and its implementation. This article argues about expectations of e-Health after the COVID 19 pandemic. It calls for continuing to put efforts towards empowering e-health for its settlement and sustainability, instead of keeping it 'idle' in the backstage, then bring it to duty when 'need arises' after un-boxing it. In this article, the author reminds of what e-health is and what it is not.

Keywords: COVID-19; e-Health; Telemedicine; AI; Telehealth; Pandemic

1   Editorial

The coronavirus disease 2019 (COVID-19) declared by the World Health Organization (WHO) a pandemic in March 2020, has globally affected almost every aspect of life on the planet. It has recorded a total number of 643,875,406 cases with 6,630,082 deaths as of December 9, 2022 [1].

The health systems around the world without exception faced great challenges in delivering their services. Challenges included multiple aspects: from combating COVID-19 and managing the cases of the disease itself to protecting patients of other diseases attending health facilities and safekeeping the medical staff within.

Electronic health (e-Health) i.e. "the use of information and communications technology in support of health and health-related fields" [2], represented by its variety of domains (Electronic records, telemedicine, mobile apps, AI ...etc) played an imperative role in delivering safe, high quality healthcare services during the lockdown and social distancing throughout the pandemic period. Utilization of e-health has been called-in by almost every discipline of therapeutic and preventive medicine [3].

COVID-19 has been reported to cause a multitude of medical conditions linked to it in different systems of the human body. In addition to involvement of e-health in serving within these conditions, it has been largely utilized in the same specialties to deliver care to non-COVID-19 cases. e-Health, particularly telehealth services, were reported to have been utilized during the pandemic in a broad spectrum of areas across preventive, therapeutic and diagnostic medical domains. The range extended from major disciplines such as cardiology, radiology, rehabilitation and epidemiology to other medical and health subspecialties and fields such as geriatrics, hepatology, anesthesiology, health education, surveillance, and medical research [3-5].

The progress of e-health marched in slow, but steady steps through the past decades amidst variable degrees of reluctance, skepticism and scrutiny. e-Health did not equally rocket as other 'e-services' during the past few years before the pandemic that witnessed the rapid proliferation of the information technology innovations and products. The COVID-19 pandemic provided the golden opportunity for e-health to surge by offering it the global stage to act. Studies from around the world reported the significant rise in e-health utilization since the declaration of the pandemic. For

*Corresponding author: Yasir Elfatih A. Elsanousi

example, in China, an increase by 20 times was observed in the e-consultations in the spring of 2020 compared to one year earlier [6]. In USA, the share of telehealth visits in an institution jumped within a 4-week period from less than 1% of total visits to 70% of total visits [7]. A considerable increase in the use of e-health during the COVID-19 pandemic has been documented in Netherlands, Norway, Australia, Spain, Germany, and India [8], as well as in other countries from all continents [9].

Fear is that e-health would lose the well deserved ground that it has won, and start phasing out after relaxing of social distancing and gathering rules as activities including health services return to 'business as usual'. By now, most of the states of the world have greatly eased or completely lifted the pandemic public health measures including mask wearing, gathering rules, and international travel requirements. However, the disease is still there and its new cases and deaths are being regularly reported with considerable numbers from countries around the globe. Just in the last four months (from August 8, 2022 to December 4, 2022), the world recorded 55,367,596 new cases including 170,809 deaths [1].The unpredictable nature of the virus and its variants contributes to the poor possibility of eradicating the disease in the near future. Hence, the role of e-health should further go on and not be withdrawn or dwarfed.

Awareness, interoperability reimbursement, data privacy, beside legal and ethical issues remain the major factors particular to e-health that used to hinder its implementation. Operational and technological problems were reported by some COVID-19 era studies [10, 11].

The COVID-19 pandemic experience facilitated a spontaneous e-health showcase at a large scale. We should cautiously rejoice this, not failing to recognize it as just the means that pushed the e-health procession further forward, but not the aim.

That said, it becomes necessary to remember that e-health *IS* an integrative companion component of the 'traditional' medical/health service with spontaneous drive in an optimally prepared infrastructure. e-Health *IS NOT* a rival substituting system competing with the existing 'traditional' medical/health system (it can operate side by side with traditional service). e-Health *IS NOT* just one of the public health measures recommended to be operated for a temporary period during the pandemics, nor is it a transient phenomenon that is only observed at the times of grand events. Moreover, e-health *IS NOT* a one block installation that is 'take it or leave it' or an 'all or none' entity. Every health system -even fragile ones may acquire their curtailed e-health capability then steadily develop it.

2 Conclusion

Right now is probably just the perfect time to mark the launch of the new 'e-Health Revolution'. We can achieve the never-disappointing 'e-health for all' through believing in the concept, strengthening the intent, and building the trust.

Compliance with ethical standards

References

[1]   World Health Organization (WHO) Coronavirus disease (COVID-19) Weekly Epidemiological Updates and Monthly Operational Updates; 2022. [Accessed 2022 Dec 14]. Available from https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports

[2]   World Health Organization (WHO): Recommendations on digital interventions for health system strengthening. Geneva: World Health Organization; 2019. [Accessed 2022 Dec 14]. Available from https://apps.who.int/iris/rest/bitstreams/1238054/retrieve

[3]   Subbhuraam V, Panigrahi D. Telemedicine. In Predictive Analytics in Healthcare, Volume 1: Transforming the future of medicine 2021 Dec 1. IOP Publishing.

[4]   Doraiswamy S, Abraham A, Mamtani R, Cheema S. Use of Telehealth During the COVID-19 Pandemic: Scoping Review. J Med Internet Res 2020;22(12):e24087 https://doi.org/10.2196/24087

[5]   Eslami P, Kalhori SR, Taheriyan M. eHealth solutions to fight against COVID-19: A scoping review of applications. Medical Journal of the Islamic Republic of Iran. 2021;35:43. http://dx.doi.org/10.47176/mjiri.35.43

[6]   Wang W, Sun L, Liu T, Lai T. The use of E-health during the COVID-19 pandemic: a case study in China's Hubei province. Health Sociology Review. 2022 Sep;31(3):215-31. https://doi.org/10.1080/14461242.2021.1941184

[7]   Wosik J, Fudim M, Cameron B, Gellad ZF, Cho A, Phinney D, Curtis S, Roman M, Poon EG, Ferranti J, Katz JN. Telehealth transformation: COVID-19 and the rise of virtual care. Journal of the American Medical Informatics Association. 2020 Jun;27(6):957-62. https://doi.org/10.1093/jamia/ocaa067

[8]   Keuper J, Batenburg R, Verheij R, van Tuyl L. Use of E-Health in Dutch General Practice during the COVID-19 Pandemic. International Journal of Environmental Research and Public Health. 2021; 18(23):12479. https://doi.org/10.3390/ijerph182312479

[9]   Hassan A, Mari Z, Gatto EM, Cardozo A, Youn J, Okubadejo N, Bajwa JA, Shalash A, Fujioka S, Aldaajani Z, Cubo E. Global survey on telemedicine utilization for movement disorders during the COVID-19 pandemic. Movement Disorders. 2020 Oct;35(10):1701-11. https://doi.org/10.1002/mds.28284

[10]   Rajasekaran K. Access to telemedicine—are we doing all that we can during the COVID-19 pandemic?. Otolaryngology–Head and Neck Surgery. 2020 Jul;163(1):104-6. https://doi.org/10.1177/0194599820925049

[11]   Rani R, Kumar R, Mishra R, Sharma SK. Digital health: A panacea in COVID-19 crisis. Journal of Family Medicine and Primary Care. 2021 Jan;10(1):62. https://doi.org/10.4103%2Fjfmpc.jfmpc_1494_20.