

Editorial

Open Access

Telehealth: A bridge divided? Bridging the digital divide for equitable healthcare access

Sundus Tariq^{a*}, Abdalrahman Zaqout^b, Saba Tariq^c

^a Professor, Department of Physiology, University Medical & Dental College, The University of Faisalabad, Pakistan/ Department of Physiology, International School of Medicine, Istanbul Medipol University, Research Institute for Health Sciences and Technologies (SABITA), Istanbul, Türkiye.

^b Student Researcher, International School of Medicine, Istanbul Medipol University, Research Institute for Health Sciences and Technologies (SABITA), Istanbul, Türkiye.

^c Dean, Pharmaceutical Sciences, Professor & Head, Department of Pharmacology & Therapeutics, University Medical & Dental College, The University of Faisalabad/ Post-doctoral Fellow, University of Birmingham, England, UK.

Correspondence: * dr.sundustariq@gmail.com

How to cite this: Tariq S, Zaqout A, Tariq S. Telehealth: A bridge divided? Bridging the digital divide for equitable healthcare access. *Journal of University Medical & Dental College*. 2024; 15(3):v-vi.



Attribution 4.0 International (CC BY 4.0)

Telehealth, which is the use of telecommunications technology in health care delivery according to the Health Resources and Services Administration, is also a subset of e-health^[1]. Telehealth, which provides medical assistance to remote patients, is performed through a variety of different actions and services which include interactions between patients and healthcare providers happening through the phone, e-mails, video calls, the web, remote devices, as well as short message services (SMS)^[1,2].

Though telehealth has great potential in developing countries, it is difficult to properly adopt it at mass levels in low and middle-income countries due to its high implementation costs and regulatory and legal limitations.

A significant boom in the use of telehealth services was seen during and after the COVID-19 pandemic. In the United States, Duke University has developed its own telehealth service, called the Tele-ICU, which allows specialists to remotely oversee patients who are intubated^[3].

In Türkiye, there has been implementation of telehealth through the e-pulse (E-Nabız) system, which was first introduced in 2015 but became more widespread in 2019 with the COVID-19 pandemic, and a video call system was integrated into the system^[4].

In Pakistan, there has also been the use of telehealth for the feeding of children younger than 24 months, and one application to monitor the experience of vaccination users^[2].

Telemedicine has a strong encroachment on developing countries as it allows rural areas countries to gain access to medical care and create local knowledge; It has been of particular interest for the past few years due to its ability to transcend common barriers, that prevent people from accessing healthcare^[2].

Even though the patients and healthcare providers have both benefited from the telehealth services, the widespread adoption of it has been slowed down by barriers which include the low digital literacy among the elderly, limited internet connections, and low internet speeds in rural and underdeveloped regions^[1].

Telehealth is a very promising field with a lot of different ways in which it can be used, however, a tricky situation has occurred, which is telehealth not being integrated into the education systems for those pursuing medicine and related studies. In a survey conducted in Türkiye, the majority of the medical students in their clinical period answered “no” to a question asking if they had sufficient knowledge of telehealth; with most of the medical students who were in their preclinical as well as others in their clinical years suggesting that telehealth should be implemented into their education system^[5].

Another concern that has arisen is access for rural/ remote populations, patients of diverse races, ethnicities, socioeconomic statuses, and inequitable access to care^[6], as well as the need for digital literacy in those who are aging^[7].

There have been other concerns about telehealth, such as autonomy and patient privacy, which were mentioned in 87% and 78%, respectively, of the literature in one review^[6].

Another problem that has been widely mentioned is the prescription of controlled substances through telehealth services, which particularly affects specialties in the medical and surgical fields that use pharmacotherapy to manage chronic illnesses^[1].

Many of those problems can and have been solved by a simple solution, like giving courses for telehealth to increase knowledge about it for students of medical fields, and the Ryan Haight Online Pharmacy Consumer Protection Act, which prohibits the sale of controlled substances without a valid prescription, which requires at least one face-to-face evaluation; one problem that can not be solved very easily is the telehealth access for people in remote areas, even though this was the original idea behind the use of telehealth ^[1].

Even though this is a problem that poses a huge risk to the future of telehealth, in a review of the studies regarding telehealth usage in the rural regions of Pakistan, there was no mention of inequitable access to telehealth care programs ^[2]. However, it has also been mentioned that for telehealth services to be used efficiently, there should be an improvement in the technological infrastructure, as well as increasing digital literacy in the elderly. ^[2,7].

While it has been said that patients of telehealth in rural regions in Pakistan have not complained of inequitable access to telehealth programs ^[2], there have not been enough studies to confirm this, as only three studies have been done in the rural regions of Pakistan. Other reviews in countries like the USA have mentioned it to be a barrier in achieving the widespread use of telehealth ^[6], and a solution has to be presented in the near future in order to provide an efficient use of telehealth and to be able to provide those services anywhere in the world.

Telehealth represents a transformative approach to healthcare, offering opportunities for overcoming traditional barriers and improving access for remote and underserved populations. While the benefits of telehealth are clear, there are significant challenges, such as the integration of telehealth into medical education and the digital divide that affects rural and elderly populations. Addressing these issues requires enhancing digital literacy, improving technological infrastructure, and ensuring equitable access. While some regions, like rural Pakistan, report fewer access issues, more comprehensive studies are needed globally.

Overcoming these problems will be important for realizing the complete potential of telehealth in providing equitable healthcare access worldwide.

CONFLICT OF INTEREST: None.

GRANT SUPPORT & FINANCIAL DISCLOSURE: None.

REFERENCES:

1. Gajarawala SN, Pelkowski JN. Telehealth benefits and barriers. *The Journal for Nurse Practitioners*. 2021 ;17(2):218-221. Doi:10.1016/j.nurpra.2020.09.013
2. Mahdi SS, Allana R, Battineni G, Khalid T, Agha D, Khawaja M, et al. The promise of telemedicine in Pakistan: a systematic review. *Health Science Reports*. 2022 ;5(1):e438. Doi:10.1002/hsr2.438

3. Wosik J, Fudim M, Cameron B, Gellad ZF, Cho A, Phinney D, et al. Telehealth transformation: COVID-19 and the rise of virtual care. *Journal of the American Medical Informatics Association*. 2020 ;27(6):957-962. Doi:10.1093/jamia/ocaa067
4. Bati S. Telehealth and its Place in Primary Care. In S.N. Guner, Y. Uzun & I. Cetin (Eds.), *Current Studies in Healthcare and Technology 2021*;116-125.
5. Egici MT, Sever SÖ, Öztürk GZ, Bektemür G, Bağcı H, Bukhari MH. What do medical faculty students think about telehealth? *Pakistan Journal of Medical Sciences*. 2024;40(8): 1735-1740.Doi:10.12669/pjms.40.8.9055
6. Solimini R, Busardò FP, Gibelli F, Sirignano A, Ricci G. Ethical and legal challenges of telemedicine in the era of the COVID-19 Pandemic. *Medicina*. 2021 ;57(12):1314. Doi:10.3390/medicina57121314
7. Jafree SR, Fischer F, Bukhari N, Naveed A. Telehealth services for aging patients in Pakistan: Understanding challenges and developing regionally relevant support through social policy. In *digital healthcare in Asia and the Gulf region for healthy aging and more inclusive societies*. Academic Press. 2024; 149-167. Doi:10.1016/B978-0-443-23637-2.00004-7