Digital Literacy, Health Inequities, and the COVID-19 Pandemic

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δ See also Reflecting on Health Inequities, pp. 579–607.

he COVID-19 pandemic has drastically changed the way primary health care is delivered. In comparison with March 2019, there was a 154% increase in telemedicine visits in March 2020, primarily driven by COVID-19 social-distancing policies.¹ Congress and insurance companies facilitated this increase by amending restrictions that had previously limited telemedicine use.² Although research suggests that telemedicine has the potential to decrease costs and increase access to health care, there are vulnerable groups at risk for experiencing telemedicine disparities if a health equity lens is not used to implement future telemedicine use.

The primary risk factor of COVID-19 mortality is age; therefore, many health care settings used telemedicine as an alternative to reduce potential exposure to older patients. Unfortunately, older adults are the least likely to use technology, such as telemedicine.¹ As an example, my parents were asked to switch their health care appointments to telemedicine throughout the COVID-19 pandemic. They did not own a computer, and the only device they owned with a camera was their smartphone. As low-income older adults, they did not have the money to purchase technology that was not a necessity before the pandemic. Fortunately, my classes started being delivered online during the COVID-19 pandemic and I was able to travel to them, so they had access to my laptop. We knew that eventually I would have to leave; therefore, we made the decision to purchase a laptop with a camera.

The access to technology problem was solved with the purchase; however, they did not know how to download and use videoconference applications. Throughout numerous days, I educated my parents on how to download different applications and use them until they felt empowered to be able to use them without me. My parents were able to independently attend their health care sessions through telemedicine, and we have weekly videoconference family gatherings now. However, public health and policymakers cannot hope that people will be able to access technology, have money to purchase up-to-date technology, and have people to help educate them on how to use technology.

Barriers to telemedicine implementation include lack of technology and digital literacy.³ Although researchers have quickly attempted to study and publish about telemedicine, there has not been an equivalent amount of increase in digital literacy research. This is emphasized by a PubMed search of "digital literacy" between 2020 and 2021 that found only 573 publications compared with 14597 publications for "telemedicine or telehealth." Additionally, only three "digital literacy" studies have been registered on clinicaltrials.gov since January 1, 2020, whereas 560 "telemedicine or telehealth" studies have been registered.

It is imperative that public health study inequities associated with telemedicine to make sure that the increase of telemedicine does not widen the current health disparities. Previous evidence suggests that barriers to telemedicine can be overcome by interventions that increase perceived self-efficacy through education.^{3,4} Additionally, the association of disability and poverty with telemedicine use should inform policymakers to ensure that technological devices with disability accommodations are covered as medical necessity.⁵ There is a growing need for public health to ensure that the advantages of telemedicine are implemented in an equitable manner so that people like my parents are not left behind. AJPH

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CONFLICTS OF INTEREST

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REFERENCES

- Mann DM, Chen J, Chunara R, Testa PA, Nov O. COVID-19 transforms health care through telemedicine: evidence from the field. *J Am Med Inform* Assoc. 2020;27(7):1132–1135. https://doi.org/10. 1093/jamia/ocaa072
- Centers for Medicare & Medicaid Services. Trump administration issues second round of sweeping changes to support US healthcare system during COVID-19 pandemic. April 30, 2020. Available at: https://www.cms.gov/newsroom/press-releases/ trump-administration-issues-second-roundsweeping-changes-support-us-healthcare-systemduring-covid. Accessed October 13, 2021.
- Scott Kruse C, Karem P, Shifflett K, Vegi L, Ravi K, Brooks M. Evaluating barriers to adopting telemedicine worldwide: a systematic review. J Telemed Telecare. 2018;24(1):4–12. https://doi.org/10.1177/ 1357633X16674087
- Gatti FM, Brivio E, Galimberti C. "The future is ours too": a training process to enable the learning perception and increase self-efficacy in the use of tablets in the elderly. *Educ Gerontol.* 2017;43(4): 209–224. https://doi.org/10.1080/03601277.2017. 1279952
- Lam K, Lu AD, Shi Y, Covinsky KE. Assessing telemedicine unreadiness among older adults in the United States during the COVID-19 pandemic. JAMA Intern Med. 2020;180(10):1389–1391. https:// doi.org/10.1001/jamainternmed.2020.2671



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