

How Far Can Telehealth Help Patients in Social Distancing due to Covid-19 in Low- and Mid-Income Countries?

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Abstract

Telehealth initiatives allow for treatment continuation despite social distancing and movement restriction, recommended measures to slow the spread of the virus responsible for COVID-19 outbreak (SARS-CoV-2). Nevertheless, social determinants are barriers to the use of telehealth in low- and mid- income countries. The context of Brazil and how the country has been managing pandemic response was used to discuss and identify possibilities to enhance telehealth pervasiveness. Possibilities can be potentially expanded to all low- and mid- income countries.

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Original Manuscript

EDITORIAL**How Far Can Telehealth Help Patients in Social Distancing due to Covid-19 in Low- and Mid-Income Countries?**

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Brazil is experiencing a major governmental crisis marked by strong disagreement between the Federal and State leaders with regard to evidence-based health information on COVID-19. At the state level leaders endorse protective measures such as quarantine, movement restriction and social distancing. But these efforts have been subverted by the Federal government encouraging people to return to work. As a result, there has been poor adoption of protective measures against COVID-19, and a major growth in official diagnosed cases of COVID-19 so that Brazil now ranks 2nd globally for COVID-19 deaths.

The Brazilian public health system is functioning close to maximum capacity and society is suffering from downturn in business. Mitigation policies for the population were voted and resulted in approval of a BRL 600 (approximately US\$ 108) emergency financial aid for low-income citizens, unemployed and autonomous workers for an initial period of 3 months - uncertainty remains with regards to its duration. While emergency financial aid was a welcome initiative, the implementation of the program ignored the realities of life for the 107 million Brazilian people who desperately needed this aid. The Brazilian state bank Caixa used a website and app to provide access to the funds, an approach that presumes the intended recipients are health literate and have access to the internet. As a result, long lines have been registered outside Caixa's physical agencies in many cities. In countries where people struggle to feed themselves and their families, who would benefit from initiatives that demands knowledge and domain over digital and telecommunication technologies, such as telehealth? And how can telehealth initiatives become a democratic alternative within healthcare systems in low- and mid-income countries?

Telehealth interventions have been recently promoted because of their potential to overcome geographical barriers, increase access to health services, and provide an alternative means to continue treating patients during the COVID-19 pandemic.[1,2] However, there are challenges in adoption of telehealth for the low-income population.[2] Social determinants such as low income, low education and low health literacy are already known barriers for participation in telehealth programs.[3] An unintended consequence of the implementation of telehealth is the favoring of a privileged minority of patients who are able to bear the costs of consultations in private centers, those able to make adequate use of technology, or with appropriate infrastructure for access (i.e. own a smartphone or a computer, have minimum broadband speed).

In Brazil, telehealth interventions will not be an option for the same 107 million people currently depending on the emergency supply. Brazil has the largest number of internet users in Latin America with 150 million users, but that still means that one third of Brazilian households lack access to the internet.[4,5] Among the poorest, only half have access to internet and that is typically of a very

basic form: 3G or 4G technology through their mobile phones with limited internet package, mostly prepaid.[4] In addition, health and digital health literacy is another barrier to effective use of telehealth.[3] It is known that people in low- and mid- income countries have lower health literacy levels than those in high-income countries. Despite the lack of national data, studies conducted in Brazilian public health settings revealed an important proportion of older adults with inadequate (low or very low) health literacy levels.[6,7]

The concept of health and digital health literacy relies on a set of context- and content- specific skills crucial for individual and community health empowerment.[8] So, making health information available is not enough; the population must be able to make sense of the information provided to develop a sense of trust and act upon reliable health information. The COVID-19 outbreak is exposing the society to an information overload without proper quality-control,[9] and having public health literacy levels would empower people to recognize, implement and disseminate trustworthy health information, allowing better engagement with telehealth initiatives.[3]

To implement telehealth in a fair and equitable manner, health service planners need to be aware that strategies for low- and mid- income countries may require solutions at different levels (*Box 1*). Shifting attention to the advancement of health literacy and digital health literacy could be a compelling way of dealing with the complex health-technology iceberg and reduce health inequities. Achieving adequate levels of health and digital health literacies enables individuals to seek, find, understand, appraise and implement health information into their situation and context both at individual and community level. Public health systems and the individual have shared responsibilities in developing, shaping and preserving those skills.[10] Governments' role includes the provision of evidence-based and good quality health information through different medias, stimulating the development of a critical thinking behavior.

The successful adoption of telehealth by the poorest will depend on well-resourced educational initiatives. While high income countries turn their attention towards issues such as prescription of medicines within telehealth, data privacy and best technology to deliver care; in low- and middle-income countries a central issue is patients' readiness for this new mode of health delivery. To achieve the best outcomes, governments must share a common message to urgently flatten not only COVID-19 curve but reduce existing inequities in telehealth implementation.

Box 1. General recommendations for developing Health and Digital Health Literacies in low- and mid-income countries.

LEVEL	PUBLIC HEALTH INITIATIVES
ENVIRONMENTAL SOCIOECONOMIC INFORMATION INDIVIDUAL	1. Broader access to internet <ul style="list-style-type: none"> • Urban areas • Rural areas
	2. Understand the context and adapt <p>Facilitated by free good quality wi-fi connection in public areas</p> <p>Common areas (public libraries, community centres, etc.)</p>
	3. Up to date evidence-based information <p>Map sociodemographic realities of specific regions taking into account health literacy strengths and limitations to further design</p> <p>Expose population to what is considered as good quality information (evidence-based) through most pervasive medias such as radio, TV, social media</p>
	4. Call for action <p>Reassure science's vital role in health</p> <p>Encourage critical thinking by stimulating independent investigation of health information on whichever source is available (internet, newspapers, TV, social media)</p>

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Supplementary Files