



The Use of Telehealth in the Treatment of HIV-AIDS

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The use of telehealth has increased during the last few years due to the COVID-19 pandemic, since all the health systems were forced to limit the services offered to those who sought help, which significantly affected the treatment of every illness that was not related to said sickness (Doraiswamy et al., 2020). This also affected the services provided to people who live with HIV (PVVIH, according to term in Spanish) and it started the use of telehealth in several healthcare offers, which is understood as the remote healthcare services provided through telecommunications technology in order to help patients (Health Resources and Services Administration, 2022). The services that telehealth encases are psychoeducation, remote monitoring of medical conditions, psychological and psychiatric services, medical examinations through videoconferences and the review of medical records, among other activities that clinical personnel might be able to cover with the use of technology.

Telehealth also meets the goal of diminishing the gap in the medical services provided to patients who receive attention regarding diverse mental, physical and psychological health problems. The evidence suggests that the results obtained through this modality are comparable with the services offered in an in-person appointment (Osenbach et al., 2013), they present drop-out rates similar to the face-to-face modality and acceptable levels of satisfaction (Chipps et al., 2020). Some of the ways in which telehealth has been used in ambulatory treatment centers are through detection and treatment programs based on computing equipment, phone apps, phone therapy and, recently, through clinical videoconferences (Fisher et al., 2021; Lai et al., 2020). The term “clinical videoconference” refers to an active videoconference held between a health service provider and a patient, with purposes that range between brief interventions to providing prescriptions and the management of medication (Lustgarten et al., 2020).

The use of telehealth in the context of HIV has increased both the timely manner and the quality of the medical services, since it reduces the long commutes

towards the attention centers, it avoids the stigmatization often experienced when visiting HIV-specialized centers and it betters the cost-effectiveness of providing timely care. During the COVID-19 pandemic, the implementation of telehealth confronted varied issues, amongst which was the patients' lack of access to electronic devices (computers, cellphones), the fact that not everyone had a private space in which to conduct the videoconference and the availability of daily internet services (Tofighi et al., 2018), as well as the lack of technical training for the medical personnel and patients. Moreover, it has been reported that the use of this attention modality between PVVIH generates conditions that affect the quality and experience, as is the case with the lack of familiarity with the technology used, fear for the security of personal information and confidentiality, among other things (Muir et al., 2020). However, there is evidence that indicates that clinical results are not necessarily dependent on the experience using certain technology—in actuality, there are many diverse platforms that stick to the Health Insurance Portability and Accountability Act (HIPAA) recommendations regarding the management of data confidentiality and security by encryption (Lustgarten et al., 2020). Taking all of this into account, it has been reported that the access to treatment through technology lessens the burden of mental illness during social, economic and public health crises—as is the case with the current COVID-19 pandemic—and offers more flexibility and access opportunities to treatment, reduces the impact of the lack of health providers and the burden associated to the social stigma that PVVIH live with (Famina et al., 2020; Price & Gros, 2014).

Recently, telehealth services have expanded in order to offer medical services both in hospitals and in the patients' home. These services have allowed the betterment of people's health conditions, the reduction of the possibility of hospitalization, the encouragement of self-care, motivation, education and self-management (Vismara et al., 2013; Wu & Keyes, 2006), the reduction of health-care costs, the removal of waiting time for patients, and

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the cost of commuting when a face-to-face appointment is sought out (Hickey et al., 2017). More so, this modality allows the patients that live in areas with little to no resources the access to health specialists from the commodity of their own homes (Dorsey et al., 2016).

Telehealth at the patient's home is defined as synchronized telehealth health services, like the system of online health consultations that allow the patients to share, transfer and communicate data or information in real time and from their own home, to a health professional located in a clinic, through the telehealth services that utilize Information and Communication Technologies (*TIC*, according to term in Spanish; Almathami et al., 2020).

A systematic revision of mobile HIV interventions demonstrated the potential that telehealth for PVVIH has to expand beyond videoconferences and phone appointments (Maloney et al., 2020). Several protocols were implemented in order to include additional education for patients, behavioral modifications, linkage to care and social support by means of apps, traditional websites and message boards. Along that line, educating patients regarding the various aspects of technology can be helpful in order to overcome obstacles. On the other hand, the results of a study that evaluated how older PVVIH could use a health app demonstrated that patients over 50 years had a lower use of said app—however, establishing simple reminders increased the use of it (Puig et al., 2021).

The use of telehealth by PVVIH shares the same advantages and barriers regarding its implementation in health services as any other intervention focused on the attention of physical and mental health. The advantages refer to the positive influences that help promote the use of digital tools, amongst which are the reduction of both waiting times and unnecessary visits to health systems and emergency rooms (Rutledge et al., 2017), access to the regions where there might be a lack of medical personnel, as is the case in rural communities, and avoiding the prolonged commute for people seeking healthcare (Casella, 2014). It has also been identified that this modality encourages both comfort and stress reduction by not making the patients deal with waiting rooms or lines and the added tiredness and fatigue.

The implementation of telehealth, however, has also dealt with barriers in its implementation. Said barriers refer to negative influences which affect the use of telehealth. These can be present both in healthcare professionals and the patients seeking help since, for example, certain things cannot be done, such as physical appraisals and evaluations, sample-taking and in-depth mental health evaluations (Balestra, 2018). It can also encourage an impersonal relationship with the healthcare provider, since the virtual medium lacks a face-to-face interaction (Yang & Kozhimannil, 2016), which can

negatively impact the continuity of the treatment and the abandonment of it.

Despite the current conditions of the healthcare system regarding the treatment of HIV, the use of digital tools took a considerable step in the quality of online attention, since these were not used by the majority of the health sectors, neither in the physical nor the mental health areas. The interest shown by those who have used these tools to both receive and offer health services and continue their treatments, encourages the shift of PVVIH towards a hybrid model of attention (online and on-site), since in certain occasions in-person assessments will be required, like when a sample is required in order to analyze the viral load count. In certain cases, online sessions can be carried out in order to avoid setbacks, delays or work limitations, and to carry out a punctual follow-up of the HIV treatment, as well as encouraging an appropriate attachment to the medical or psychological treatment as means to achieving the set goals to manage HIV.

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