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EDITORIAL

Digital physical therapy in the COVID-19 pandemic

On March 11th/2020, the World Health Organization (WHO) declared Coronavirus Disease 2019 (COVID-19), a disease caused by the new coronavirus (severe acute respiratory syndrome coronavirus 2-SARS-COV-2), a pandemic.[1] In this global crisis, physical therapy all over the world, is being challenged to maintain its professional clinical activities in primary and secondary care in private clinics and public health systems.[2,3] Part of the challenge is to continue to provide necessary clinical care in a safe manner, for physical therapists, patients, and the community, by following the general recommendations of the WHO.[1] Social distancing and the interruption of physical therapy activities can have a tremendous negative impact on the health of thousands of patients. Digital physical therapy offers the possibility to continue providing some physical therapy services to patients, but regulations and implementation barriers are extremely heterogeneous around the world.

The definition of digital physical therapy

Before the COVID-19 crisis, in 2017 the World Confederation for Physical Therapy (WCPT) launched a collaboration to develop initiatives to the global practice and regulations of digital physical therapy practice through a Joint WCPT/INPTRA digital physical therapy Practice Task Force (Task Force). This report published in 2019 defined digital practice as ''a term used to describe health care services, support, and information provided remotely via digital communication and devices''. The purpose of this initiative was ''to facilitate effective delivery of physical therapy services by improving access to care and information and managing health care resources.''[4] However, for several physical therapists who have never had contact with this terminology, it is important to be aware that different terms are used in this field. There is still no global well-accepted term or definition for digital physical therapy among the literature industry, policymakers, and stakeholder groups. The variety of technologies that encompass this term may include *tele-education*, *telemedicine*, *telemonitoring*, *tele-assistance*, *mobile health*, among others, and each field has its subset of technologies and specificities.

The heterogeneity and barriers of digital physical therapy

The worldwide COVID-19 pandemic forced the Brazilian health system to promptly adopt telehealth in different health care areas. The Federal Council of Physiotherapy and Occupational Therapy (COFFITO) allowed the use of telehealth, more specifically teleconsultation, teleconsulting and telemonitoring, for physical therapists (Resolution n° 516/March, 2020).[5] This change was promptly adopted to provide safe treatment delivery according to the WHO recommendations, however, no guidelines are available for physical therapists on how to use these technologies.

Some countries currently use specifically designed and secure paid technologies to aid patient rehabilitation and monitoring. However, many physical therapists in Brazil and other similar countries are using free video conferencing software such as Google Hangouts, Zoom, and Skype although these tools were not designed to provide the necessary security in the sharing of health data. Other options include web-based platforms to create customized home-based exercise programs or augmented virtual reality platforms.

The implementation of digital physical therapy should be done proactively rather than reactively to generate long term benefits to all parties involved. The COVID-19 crisis has been considered an opportunity for the advancement of telehealth in several countries. Australia, England, and the United States are facing several challenges, however, they included digital practice within the healthcare system a few years ago and recently their associations developed guidelines to assist professionals during the COVID-19 outbreak. The digital practice uptake was only possible because these countries already had the infrastructure needed to support these technologies. Countries like Brazil are just starting to discuss digital practice due to the recent regulation changes. There are several barriers related to digital practice implementation in a country that depend on different factors including infrastructure, legal and social issues, and economic aspects. The most important barriers are related to cost and reimbursement; legal liability, ethical

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issues such as confidentiality, outdated equipment, patient age and level of education; computer literacy, bandwidth range, and internet speed.[4]

Opportunities and perspectives

Digital physical therapy offers opportunities for users, service providers, and society, such as the expansion of access to health providers or specialists, encouragement of self-management, increase of flexibility for healthcare delivery, and decrease of sick-leave duration. Treatment efficacy and patient evaluation using digital practice were already investigated for some acute and chronic musculoskeletal conditions, cardiac conditions, neurological problems, post-surgical rehabilitation, pain management, pelvic floor conditions, and respiratory dysfunctions.[6–14]

The large-scale implementation of telehealth demands innovation in the technology market to improve capabilities and reduce cost to increase benefits. An important step for digital practice that will need support is data integration. As patients are remotely assessed or treated, professionals will need access to their relevant health data to provide the best care possible. That may be particularly challenging in a country where hospitals and clinics have different electronic health records systems or no electronic record system at all.

Brazil as many other countries will need specific laws and guidelines on how to work with telehealth so that obligations and rights for all involved parties are clearly stipulated. Currently in Brazil, in the absence of specific guidelines and legislations, the safety of patients treated with telehealth is supported by resolutions of professional councils and laws about data protection on the internet such as law 13.709/2018 and its amendment 13.853/2019.[15] This law is known as the ''General Law on Protection of Personal Data (LGPD)'' and it reinforces concepts from the federal constitution in the online environment like free speech, privacy and honor protection, and access to personal information. The LGPD states that clients own their data meaning that individuals must know how their data are used and they can also require the deletion of all stored data from online service providers.

The COVID-19 pandemic is stressing the capability of the health care systems across the globe, including the delivery of care for non-pandemic related health conditions. Digital practice will not be the solution for all the challenges that physical therapists will face; however, it is an exponentially growing field, widely adopted within the virus outbreak, and with the potential to reduce costs, increase quality, and overall accessibility of modern health care systems. The question now is whether physical therapists are prepared to implement digital practice to offer rehabilitation services during this undefined period of social distance due to the COVID-19. There is an unmet need to develop specific guidance on the many specific issues involving digital physical therapy practice. This task should involve each country's governmental authorities, physical therapy councils, and corresponding associations.

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Conflict of interest

The author Barreto R.P.G is one of the owners of Vedius, a Brazilian company that has an online platform that enables health professionals to create and share home-exercise programs.

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