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EDITORIAL

Strategies for a safe and assertive telerehabilitation practice



During the coronavirus disease (COVID-19) pandemic, many countries issued an unprecedented array of temporary regulatory changes to provide more flexibility for the healthcare system. In Brazil, there was emergency regulations for the delivery of telemedicine¹ and telerehabilitation.² However, the accelerated regulations aiming for rapid introduction of remotely delivered interventions were accompanied by poor guidance for implementation and insufficient professional training. Despite strategies to overcome potential barriers involved in the implementation of telerehabilitation in Brazil published in a recent editorial in the Brazilian Journal of Physical Therapy, hesitation among clinicians remains. Therefore, we have developed a series of practical recommendations that may guide physical therapists throughout the use of technology for the treatment of their patients (Table 1). The term telerehabilitation will be employed henceforth to refer to remotely-delivered interventions used by physical therapists. Examples will focus on musculoskeletal pain conditions, such as low back pain and osteoarthritis, but recommendations may apply to a wide range of settings and conditions within physical therapy.

Keep using evidence-based treatments

Evidence-based treatment refers to interventions that are supported by scientific evidence, in combination with clinicians' experience, and patients' preferences. This represents the foundation of physical therapy interventions and all professionals in the field should be encouraged to based their practice on evidence, independently of mode of delivery. Best practice for chronic musculoskeletal pain includes provision of education/information about the patients' condition and management strategies and encouragement to pursue physical activity or exercises. In addition to promoting these strategies based on the best available evidence, telerehabilitation initiatives are an opportunity to encourage self-management and experimental learning strategies.

Understand context and preferences

Individuals with musculoskeletal conditions place great importance on patient-centered interventions. ⁷ Telerehabilitation allows for tailored interventions to be delivered through a variety of synchronous/real-time (eg, videoconference) and asynchronous/store-forward (eg, digital images) means.^{8,9} To date, the literature provides evidence of good outcomes for a variety of musculoskeletal conditions when using either synchronous or asynchronous strategies, 10-12 but the combination of both approaches offers a more complete and personalized treatment experience. Clinicians may use the digital environment to support self-management strategies according to patients' preferences. 13 Individuals with chronic pain often report a feeling of anxiety and catastrophizing due to little knowledge about pain, especially during onset of symptoms, and telerehabilitation can focus on the provision of information with regards to pain, pain physiology, and activity pacing, for example. 13 Patients can be frustrated or confused if the mode of telerehabilitation delivery does not match their digital health literacy levels¹⁴ or expectations, ¹⁵ and also if there is an overload of information. 16,17

Communicate effectively

Non-optimal communication may result in a breakdown in patient/therapist relationship and weakened therapeutic alliance, which can potentially result in poor clinical outcomes. ¹⁸ Conversely, clear communication with patients often leads to better engagement during treatment. ^{7,19} Previous studies showed barriers to development of therapeutic alliance related to lack of visual cues and misunderstanding, therefore requiring advanced communication skills from clinicians to ensure best telerehabilitation practice. ^{20,21} Beyond the provision of consistent information, patients prefer information delivered through an understandable language, avoiding technical terminology. ¹⁹ Therapists must prevent patients' frustration or confusion with information

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What to do	How
Evidence-based is the foundation	 Share evidence-based information with your patient through diverse media, in an understandable language;
	Encourage active participation in discussions of health-related topics;
	 Support a non-judgmental environment that encourages expressing personal beliefs;
	Use teaching-back strategies for motivating participation.
Choose the best way of communicating	• Choose simple words to avoid misunderstanding, avoid technical language or use of medical jargon;
	Give simple commands to avoid information-overload;
	• Use specific body regions and spatial references to guide exercises or meditation (eg, align your spine imagining your head wants to reach the ceiling);
	• Video material and videoconferences are good ways of demonstrating exercises: you can perform them to mirror your patient.
Listen to your patient's preferences	 Look forward to understand: your patient's preferred means for receiving care (eg, telephone, videoconference, text-messaging) or suggest trying different modes to understand the patient's preference; your patient's expectations and acceptability for telerehabilitation;
	 your patient's expectations and acceptability for telerinabilitation; your patient's needs in terms of information content and physical activity/exercise program.
Tackle demotivation	Use shared experiences to build and strengthen therapeutic alliance.
	Include weekly challenges;
	Send reminders such as tailored pre-recorded messages;
	Provide useful information/strategies that patients can easily put in practice;
	Align your rehabilitation program to balance necessary activities with the patient's
Ensure patient has access	 preferred activities (eg, include functional activities that he/she shows interest in). Understand your patient's reality: sociodemographic condition, previous experience with technology;
	Assess your patient's health and digital health literacy levels;
	Adapt your interventions to encompass the type of medias he/she has access to.

overload by adopting simple terminology (eg, for guiding the execution of exercises) and choosing complementary materials that match patients' health literacy level.²²

Motivation is key

Patient engagement is a major issue limiting growth of telerehabilitation, 14,23 and it can be affected by lack of acceptance by the elderly population or poor interaction with digital sources of information. 11,24 Engagement success leads to better treatment outcomes and it depends largely on patient motivation. 14,17 Feeling of impersonality due to lack of face-to-face contact with the health professional, the presence of technical problems during telerehabilitation sessions, and the inability of performing proposed activities might lead to patient demotivation and further disengagement. 23,25,26 Nevertheless, patients who perceive the need to improve their health identify telerehabilitation interventions as a source of motivation, especially in cases when they are able to see their own improvement. 15 Studies show several techniques and strategies that might help tackling patients' demotivation, such as the use of reminders, 15 weekly challenges, and periodic feedback.26

Ensure access

Barriers to access telerehabilitation might include one or more of the following: a) lack of proper device (eg, computer or smartphone), b) lack of stable, good quality broadband internet, and/or c) low familiarity with technology. 15,27 In Brazil, the percentage of households with computers or notebooks has been dropping over the past 10 years in both urban and rural areas, despite the advance in internet access. 28 This contradiction is explained by the increase use of 3G and 4G technology through smartphones, 28 often accompanied by limited or prepaid internet package, not compatible with download of videos or video conferences. In addition, low familiarity with technology might lead to difficulties of use²⁷ and a burden for the patient and the clinician. 15 Clinicians must be aware of patients' background (ie, sociodemographic information and previous experiences with technology) to best design a telerehabilitation intervention that supports patient participation and engagement.17

The evidence on acceptability of remote delivery of interventions for a diverse range of medical conditions (eg, pain management, post-surgery, cardiac and pulmonary conditions)^{12,29-31} indicate mostly positive findings, including a feeling of closeness despite the distance,¹¹ ongoing support from health professionals,³² and continuous motivation

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for learning.³³ With the outbreak of COVID-19, telerehabilitation has become an important option for physical therapists to continue assisting those in need. Presenting clear and practical recommendations for telerehabilitation may empower clinicians to better use technology as an alternative mode of delivering physical therapy.

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Conflicts of interest

The authors declare no conflicts of interest.

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