

Prescription of Home-Based Physical Exercises: A Possibility during Covid-19 Pandemic and a Solution for Barriers of Access in Cardiac Rehabilitation

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Due to the pandemic of COVID-19, many processes have been reviewed around the world, in the context of rehabilitation based on the prescription of exercises was not different, several groups of patients before in outpatient rehabilitation, were prevented from continuing to attend rehabilitation centers, this situation made it necessary to make adjustments in the logistics of care of these individuals.

Among the possibilities that have gained space in the field of health, telerehabilitation has become a viable and usual possibility for professionals to conduct the care of these patients, this is a modality of scientific support to patients with different functional clinical conditions, such as orthopedic, neurofunctional, cardiovascular, respiratory and metabolic rehabilitation [1-3].

In the midst of this scenario of change in health care models, a prominent group is patients in cardiovascular rehabilitation, who in addition to virtual interaction require constant monitoring of clinical parameters, such as blood pressure and heart rate assessment. Currently, these measures are simpler to evaluate, due to the implementation of semi-automatic equipment, such as: digital sphygmomanometers, cardiofrequencímetros, smartbands and smartwatches, making remote measurements possible [4,5].

One question has guided the conduct of the professionals involved in rehabilitation services: how to make these programs feasible? To answer it it is necessary to identify what are the barriers to its use, as an example of potential difficulties we have access to technologies for telerehabilitation, numerous patients may encounter obstacles in the access or use of these means of care, requiring the support of third parties.

Another question to be identified is how the role of the health professional will perform the evaluation of this patient for exercise prescription and monitoring of the gains obtained. For this, there are several instruments in the literature that can be used to enable this evaluation, such as: the Duke Activity Status Index [6], Short-Form Health Survey [7], Goal Attainment

Scaling [8], The International Physical Activity Questionnaire [9], these assess functional capacity, quality of life, level of physical activity and limitations for exercise prescription [6-9]. Not restricted to only these used as examples, the current scientific literature has a wide range of tools that aim to elucidate clinical and functional conditions of these patients, the recommendation of which instruments to implement should be derived from the anamnesis performed by a trained professional. When dealing with the prescription of physical exercise for patients in home cardiovascular rehabilitation, we should consider some points: the type of exercise to be practiced, for aerobic exercise the possibilities are: stationary gait, walking and running, the use of stairs as an instrument and exercises such as flip flops in addition to the use of the rope. For resistance exercises, we can suggest the use of exercises with materials present in their homes and also the use of exercises with body weight [4].

For the control of the prescription, the determination of the time of the physical exercise session, the recovery between the sets and between the exercises, the control of intensity and volume are strategies with simple delimitation for home exercise, it is important that the patient be able to maintain the focus on the execution models prescribed by the professionals. In order to enable this control of exercise variables, there are validated stress self-assessment scales such as the BORG scale and Talk Test, tools that do not generate additional costs and bring evaluation measures compatible with the prescription by ventilatory thresholds [10,11].

In addition to the evaluation, prescription and follow-up of telerehabilitation, it allows the realization of simple guidance on cardiovascular anatomy and physiology, risk factors and pathophysiology of cardiovascular diseases, providing the individual with knowledge about his/her health condition and autonomy about the treatment [3].

We recommend performing home exercise in this group of patients because in addition to the benefits associated with the practice of regular exercises in the neurocardiovascular, musculoskeletal and immunological systems, this rehabilitation program modality is centered on the patient, bringing the individual as a determiner of their results. It is important to highlight how indispensable is the evaluation of a specialized professional personally or remotely (meeting the recommendations of social distancing proposed by regional agencies), so that the exercise can be prescribed safely and effectively we highlight the importance of controlling adherence to therapy so that the result is achieved.

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