

A feasible group aerobic training program for patients at the chronic phase post-stroke

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Abstract

Lack of physical activity and specifically aerobic activity is a major concern in stroke rehabilitation. The impact of stroke on physical activity is evident on all levels of the International Classification of Functioning Disability and Health model. Research evidence shows the importance of promoting physical activity among post-stroke patients, with an emphasis on moderate and high intensity aerobic training.

Aerobic training programs have various positive effects for post-stroke patients, such as an increase in cardio-pulmonary endurance, improvement of mobility, and a decrease of risk factors for cardiovascular diseases and recurrent strokes. Accordingly, current clinical practice guidelines recommend aerobic exercise as part of routine stroke rehabilitation.

An exploration of the clinical field, however, demonstrates a difficulty in applying these recommendations, and often rehabilitation for post-stroke patients does not challenge the cardiovascular system.

To help bridge this gap, a feasible training program was developed offering practical principles for establishing aerobic training groups for post-stroke patients at the chronic phase, as well as an instruction booklet, which enables implementation of the suggested program in outpatient physical therapy clinics.

This article describes the development process of the program and presents the instruction booklet. The development was done in several stages and included a survey among physical therapists, setting criteria for participation in the training program, selecting tools to measure training intensity, constructing the training, writing the instruction booklet, and conducting a pilot program.

The training program and instruction booklet helped assimilate aerobics practice as part of the physical therapy treatment provided in the community. Expanding the service to more clinics will improve accessibility to aerobic training for people in the chronic stage post-stroke. The instruction booklet can support physical therapists who wish to implement the program.

Keywords: Aerobic training, Knowledge translation, Physical therapy, Rehabilitation, Stroke