

ORAL PRESENTATIONS

OP5

The Impacts of Home-Based Rehabilitation and Self-Management Program on Community-Dwelling Stroke Survivors: A Randomized Controlled Trial Protocol

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ABSTRACT

Background and Objectives: Several barriers that preventing community-dwelling stroke survivors from participating in traditional clinic-based therapy have caused the rise of home-based physiotherapy as a potential alternative. However, there is limited research on the integration of home-based and self-management programs for stroke survivors. Therefore, this study aims to examine the effectiveness of an integrated home-based physical fitness and self-management program (i-StrokeFit+) on aerobic capacity, muscle strength and endurance, walking performance, level of physical activity, and quality of life in stroke survivor. **Method:** Over the course of 14 weeks, this study will utilize a Randomised Controlled Trial (RCT) design with three measurements. Measurements will be taken at baseline, 8th, and 14th weeks. Block randomization will be used to randomly assign 48 people into the experimental or control group. An integration between home-based program that consist of an aerobic and strengthening exercise, and self-management programs will be provided to the experimental group. A two-week adaptation training will be provided beforehand. The control group will receive usual care treatment. Aerobic capacity, muscle strength, and endurance are the primary outcomes; walking performance, level of physical activity, and quality of life are the secondary outcomes. A linear mixed model ANOVA using time as the within-between dependent variable will be performed to analyse all outcomes. **Result:** The primary outcomes of this study will focus on the changes in aerobic capacity, muscle strength and endurance, while the secondary outcomes will assess effects on walking performance, level of physical activity, and quality of life among stroke survivors.

Conclusion: It is anticipated that the i-StrokeFit+ will have a positive impact on physical fitness, including aerobic capacity and muscle strength and endurance, among community-dwelling stroke survivors.

Keywords: *community-dwelling; home-based; physical fitness; physical therapy; self-management; stroke*

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