Power Exercise for Stroke Recovery: A Pilot Randomized Controlled Trial

Location: Kelowna, BC and Hamilton, ON

Number of participants: A total of 60 participants will be involved in the study: 30 in Kelowna

and 30 in Hamilton.

Recruitment period: Until December 2027

Description: An earlier study at McMaster University found that a power-focused resistance training program (POWER) was feasible and can improve physical function and health-related quality of life among stroke survivors. This study is the next phase of research and will compare POWER to the current resistance training guidelines. The study is taking place at both UBC Okanagan in Kelowna, BC and McMaster University in Hamilton, ON. We will recruit 60 people who have had a stroke more than 6 months ago to take part in one of two exercise programs: POWER or STRENGTH. Both groups exercise 3 times per week for 10 weeks and take part in 3 assessments.

Language: English only.

Eligibility: People will be eligible to participate if they are 19 years or older, live in the community, and have had their stroke more than 6 months ago. Individuals must be able to walk more than 10 meters (with or without a walking aid) and have mild to moderate stroke severity (modified Rankin Scale ≤3).

Participant requirements: Participants will be enrolled on a rolling basis until the target sample size has been reached (60 participants ~December 2027). Each participant will undergo a screening and consent process prior to taking part in the study. There will be three assessments: one before the exercise sessions, another after, and a final assessment 8 weeks following. Participants in both the STRENGTH and POWER programs will attend three sessions per week during the 10-week training period. Each session lasts between 40 and 90 minutes, resulting in an estimated total time commitment of approximately 46 hours over the course of the study.

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