

Assessing a telehealth seated exercise program on post-stroke balance and mobility: A mixed-method design

Location: Canadian

Description: Virtual care has become a necessity since the development of the COVID-19 Pandemic and is evident in the growing number of virtual care stroke exercise studies (Laver et al. 2020). However, many physical therapists have safety concerns with online delivery of traditional walking or standing exercises in those living with a mobility impairment. Thus, safer alternatives that require minimal to no in-person assistance need exploring. An alternative to walking and standing exercises is chair-based exercises, which have been effective in improving balance and mobility outcomes in those living with a stroke (Mackie & Eng, 2023) but has not been delivered virtually. The objective of the V-PASE study is to determine the effect of a 10-week telehealth seated exercise program on balance, mobility, quality of life, and cardiometabolic health in those with a chronic stroke and mobility impairment

Language: The program will be delivered in English. Exceptions will be made to the English language criteria if assessors and instructors can translate for the participant.

Eligibility:

- Adults (aged 19 years or older) with chronic stroke (≥ 6 months post-stroke)
- Ability to stand up from a chair
- Mobility impairment of lower extremity (requires a walking aid, with or without close supervision, per clinical judgement)
- Able to safely engage in exercise and tolerate 60 minutes of exercises
- Able to communicate in English (per clinical judgement)
- Have access to a tablet, computer, or laptop with internet and email access

Participant requirements:

- Attend a 60-minute virtual setup session prior to the exercise program start, to review safety, equipment, and exercise instructions.
- Join seated exercise sessions via videoconference (e.g., Zoom or MS Teams):
- 10-week group: 3 times per week for 10 weeks (each session is 60 minutes).
- Boot Camp group: 3 times per week for 2 weeks, following a 10-week delay.
- Use provided equipment during sessions (tablet, weighted cuffs, and Fitbit Versa 4).
- Participate in virtual assessments at: Baseline, Post 10-week intervention, 2-month follow-up. (Boot Camp group only): an additional assessment post 2-week intervention.
- Complete the blood sample collections (2 times for the 10-week group, and 3 times for the Boot Camp group)

Total period of involvement will be approximately 5 to 6 months.

Recognition: Participants will receive 30 sessions of a free online exercise program and be provided one-on-one with an exercise specialist (physiotherapist or kinesiologist). They will also receive a \$20 gift card to help cover transportation costs after each visit to the blood collection facility.

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