Psychometric properties of standardized balance confidence, fear of falling, and falls-efficacy measures in people with lower limb amputations

Background:

In Canada, >50% of community-dwelling lower limb amputees (LLA) fall at least once each year, a rate that is almost twice that of community-dwelling older adults. While the physical consequences of falls may be readily apparent, psychological sequelae that follow may be just as, if not more, detrimental than an actual fall itself. Current measures of balance confidence show no change in LLA following discharge from rehabilitation. The limited detectable change may be due to content validity challenges of the measures as they were not developed for the unique challenges faced by LLA.

Objectives:

- 1) Review items from standardized scales measuring falls-related concerns with participants to determine the applicability of test items to the LLA population.
- 2) Solicit novel examples of relevant activities from participants to inform the development of an LLA-specific balance confidence scale.

Proposed Methods:

This cross-sectional study will include adult unilateral/bilateral LLA (n=60) recruited through the Outpatient Amputee Rehabilitation Program at Parkwood Institute. Falls-related concerns will be evaluated using seven relevant clinical measures of a concern for falling. Participants will be asked to identify inapplicable questions and to provide i) a list of activities they are physically able to do but are avoiding; and ii) a list of activities they currently do but are worried about becoming unsteady or falling when performed.

Future Directions/Implications:

The results of this project could provide important details for the creation of an amputee-specific measurement tool to better quantify psychological concerns related to falls.