BEST, KRISTA1,2; Routhier, François1,3; Sweet, Shane1,3; Arbour-Nicitopoulos, Kelly;5 Borisoff, Jaimie;6 Noreau, Luc;1,2 Martin Ginis, Kathleen;7 Canadian Disability Participation Project 1CIRRIS; 2Université Laval; 3CRIR; 4McGill University; 5University of Toronto; 6BC Institute of Technology; 7McMaster University.

Rationale & Objectives

- The health benefits of physical activity are well-known.1
- The importance of physical activity (PA) is amplified for manual wheelchair (MWC) users.2
- Few MWC users are active enough to receive health benefits.3,4
- Based on the Medical Research Council Framework5 for developing complex interventions, the objective of this study is to develop a Smartphone-delivered Peer-led Physical Activity Counselling (SPPAC) program for MWC users.

Methods

1. Electronic online databases were searched (PubMed/MEDLINE, CINAHL, PsycINFO) using keywords: physical activity/exercise intervention; manual wheelchair; peer-led; telephone/Smartphone.
2. Focus group were done with experts (occupational therapists, knowledge users, MWC users). Experts discussed their perceptions and opinions of the SPPAC intervention, including the delivery method (peer-led, Smartphone), frequency and duration of program, important components, and perceived barriers. Thematic content analysis were performed.

Results

1. Scoping Review

- n = 17
- Several barriers and facilitators to physical activity participation for MWC users have been addressed.
- Existing interventions have low to medium effects on PA behaviour.
- Important psychological variables (autonomy, motivation, self-efficacy) have yet to be fully included.

2. Focus Groups

- n = 11
- 5 OTs
- 2 Knowledge Users
- 3 MWC users
- 1 MWC & Knowledge User

“Peers can provide extra motivation to get active.”
“SPPAC is inclusive and has the ability to reach people of all ages and all diagnoses.”
“MWC users have the ability to participate in PA in the ‘real-world’.”

“Smartphones may have positive effects on motivation (e.g. SMS, social media, voice/video calls, apps to track PA)”
“SPPAC should not be limited to Smartphones”
“A well-trained peer and initial evaluation of MWC skills are important”
“Basic MWC skills are needed before starting SPPAC”

Conclusions & Future Directions

- SPPAC has theoretical backing and expert agreement for approaches to implementing important psychological variables that can influence PA participation.
- Peers provide vicarious experience to reinforce self-efficacy and are a source of motivation.
- Use of a Smartphone and goal-setting supports autonomy and motivation.
- Apprehensions of SPPAC need to be addressed (e.g., knowledge of peer-trainers, virtual vs. physical interactions).
- Future studies:
  - Delphi surveys to attain consensus of SPPAC intervention
  - Randomized controlled trial to evaluate the feasibility and efficacy of SPPAC