inMotion: A Phone-Based RCT to Increase Physical Activity and Improve Major Depression

Samantha B. Artherholt PhD1,2, Amanda E. Smith BS1, Maria J. Acosta Garcia BS1, Charles H. Bombardier PhD1

Departments of 1Rehabilitation Medicine and 2Psychiatry and Behavioral Sciences, University of Washington School of Medicine, Seattle, WA

Introduction

- Major depressive disorder (MDD) is a common secondary condition in individuals with multiple sclerosis (MS), with a lifetime prevalence estimated to be near 50%. MDD is highly disabling in this population, contributing to time lost from work, low quality of life, and poor health.
- Commonly used treatments for MDD are not effective for many with MS, and there are often significant barriers to treatment.
- We have previously shown that physical activity has promise as a treatment for MDD, especially for people with disabilities such as MS who may be inactive.
- The current ongoing randomized controlled trial (RCT) extends this model to people aging with MS and/or with limited mobility, including wheelchair users.

Objectives

- To increase physical activity and improve depression
- To make the intervention accessible by delivering via telephone

Enrollment to date

- 324 potential participants with MS have been screened, with 74 enrolled (23%), 8 refused (2%) and 242 ineligible (75%)
- More than 4 potential participants are screened for every eligible participant with MS
- Ineligibility due primarily to lack of depressive symptoms (N=153, 63%)

Recruitment sources

- 43% of participants have heard about the study through organization-related web postings, print advertisements, discussion groups, articles, or listservs
  - Examples: National MS Society, MSAA, ResearchMatch
- 25% have come from our study registry at the University of Washington (UW)

Discussion

- The inMotion Study is ongoing; we are currently randomizing participants and are more than halfway to our accrual target.
- A phone-based intervention to increase physical activity and improve MDD in people with MS is feasible, although recruitment challenges have been significant.
- Results of this RCT will determine the efficacy of this phone-based MI approach to improving major depression in people with MS.
- We will explore potential mediators of the relationship between physical activity and MDD, such as fatigue, pain, and general health status.

Study Design

- Inclusion criteria:
  - Age ≥45
  - Depressive symptoms (10 or higher on the PHQ-9).
  - Currently exercising less than 2.5 hours per week (moderate or higher intensity)
  - Ability to use a manual wheelchair

- All participants are mailed an MS exercise DVD and physical activity intensity guidelines at week 0.
- Participants in the treatment condition receive 7 motivational interviewing (MI) sessions over 12 weeks in which they review exercise history, goals, benefits, and barriers with a study counselor.
- Participants in the control condition receive a single psychoeducational session at week 0.
- Physical activity is recorded via actigraphy at baseline, 12, and 24 weeks.
- An independent examiner assesses outcomes in both groups at 6, 12, and 24 weeks.
- Participants are paid up to $120 to take part in the study.

This project was supported by a grant from the United States Department of Education, National Institute on Disability and Rehabilitation Research grant #H133B080024. These contents do not necessarily represent the policy of the Department of Education, and you should not assume endorsement by the Federal Government.