

Author: Jared Telecky, OMS

Title: A Pro-Bono Group Exercise and Wellness Program for Individuals with Multiple Sclerosis In Underserved Communities: Preliminary Results

Background:

Individuals with multiple sclerosis (MS) experience significant barriers to regular exercise participation, particularly in socioeconomically disadvantaged areas. Despite well-documented benefits of exercise in MS, many lack access to adapted exercise programs and do not know how to safely exercise with their disability.

Objectives:

To evaluate the effects of a 6-month community-based group exercise and wellness program on: 1) physical activity levels, 2) energy expenditure, and 3) exercise adherence in underserved individuals with MS, as part of a larger cohort study including participants with various neurodegenerative conditions.

Methods:

This prospective observational study enrolled participants with various neurodegenerative conditions from the Cleveland Clinic. For this preliminary analysis, we focused on participants with MS (n=3, with 2 additional participants pending final assessments). The intervention comprised supervised group exercise sessions (60-75 minutes, 3 times/week) combining aerobic, strengthening, and stretching exercises, with biweekly wellness education. Physical activity was measured using ActiGraph monitors at baseline, 3-months, and 6-months.

Results:

Initial data from three MS participants demonstrated progressive increases in both physical activity and energy expenditure. Average daily steps increased from 7,364 at baseline to 10,266 at 3 months and 11,184 at 6 months. Daily caloric expenditure showed substantial improvement, increasing from 1,328 calories at baseline to 2,028 calories at 3 months and 2,298 calories at 6 months, representing a 73% increase over the intervention period. No adverse events were reported.

Conclusions:

Preliminary results show promising increases in physical activity levels and energy expenditure in persons with MS from underserved communities. While complete analysis awaits final assessments from additional participants, these initial findings suggest that supervised group exercise programs can effectively promote sustainable physical activity behavior change in this population. The broader study outcomes, including participants with other neurodegenerative conditions, will provide further insights into the program's effectiveness.