

Physical Activity in People with Multiple Sclerosis and the Clinician’s Role: Preliminary Analysis

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Background

- Physical activity (PA), such as exercise, has been associated with numerous benefits for people with multiple sclerosis (PwMS).
- Despite the benefits of PA in PwMS, only 20% of PwMS reach the recommended level of ≥ 150 minutes of exercise and/or lifestyle PA per week,¹ and even in newly diagnosed PwMS, 36% were insufficiently physically active, prompting the need for efficacious PA interventions.²
- Clinicians know that physical activity is beneficial; however, they find that their practice tends to be more reactive to new symptoms rather than prescribing physical activity.³

Objectives

The aim of this preliminary analysis is to identify 1) the level of physical activity PwMS are engaging in and 2) the frequency that clinicians recommend physical activity.

Methods

Participants

- A convenience sample of 75 individuals with a diagnosis of MS.

Study Design

- Preliminary analysis of survey study.
- Data was collected through a Microsoft Forms survey that took approximately 20-30 minutes to complete.

Main Outcome Measures:

- International Physical Activity Questionnaire- Short Form (IPAQ-SF):
 - Participants were asked how many days during the last week and the duration that they completed vigorous, moderate and walking activities, and sat on a typical weekday.⁴
 - Data are presented as minutes per week.
- Clinician Recommendations:
 - Participants were asked if their clinicians ever provided them with:
 - Benefits of PA and exercise.
 - Recommendations to increase their PA and exercise.
 - Current physical activity and exercise guidelines for MS.
 - Information on how PA and exercise may improve their symptoms.

Statistical Analysis

- All analysis was performed with SPSS Version 26.0.
 - Median and IQR for the PA parameters.
 - Frequencies for clinician recommendations.

Results

Table 1. Demographic characteristics of the preliminary survey participants		
Age	Median (IQR)	54 (16)
Gender	Women	77.30%
	Men	20.00%
	Non-binary	2.70%
Race	White	90.70%
	Black	5.30%
	Mixed	2.70%
	Unknown	1.30%
Ethnicity	Hispanic	6.70%
	Not Hispanic	93.30%
MS subtype	Relapsing MS	82.70%
	Secondary Progressive	8.00%
	Primary Progressive	5.30%
	Unknown	4.00%

70.7% of the survey participants met the physical activity guidelines of ≥150 minutes per week

Table 2. Physical activity levels of preliminary survey participants		
Physical Activity	Median (IQR)	% who completed ≥1 day
Vigorous (min/week)	17.5 (92.5)	57.40%
Moderate (min/week)	60.0 (140.0)	74.70%
Walking (min/week)	140.0 (235.0)	88.00%
Total PA (min/week)	330.0 (380.0)	-
Sitting (min/week)	2520.0 (1470.0)	-

While 69.3% of survey participants report a clinician advised them that physical activity could improve symptoms, only 10.7% were provided current guidelines.

Table 3. Frequency of Clinician guidance and recommendations on physical activity	
The clinician:	% Yes
Informed them of the benefits of physical activity	52.00%
Recommended increasing physical activity	58.70%
Provided current physical activity guidelines for persons with MS	10.70%
Advised that physical activity may improve some of their MS symptoms	69.30%

Discussion

- The participants in this survey study (70.7%) are meeting the PA guidelines more than has previously been reported in the literature (20%).
- Over half of the participants in the study were performing at least 1 day of 10 minutes of vigorous PA per week.
- Only 52% of participants reported that clinicians informed them of the benefits of PA, and only 58.7% were recommended to be PA.
- There was a large amount PwMS who have not had a clinician mention PA to them.

Conclusion

- The participants in this study are a sample of convenience; therefore, the amount that meet the recommended levels of PA may not be representative of the MS population.
- Many PwMS report that clinicians do not speak to them about PA, and in those that do, only 10.7% provide the guidelines for PwMS.
- This survey study may help to highlight the disconnect between clinicians and PA guidelines for PwMS.
- These results in the full cohort can be used to help design a program to increase clinician involvement and knowledge on recommending PA to manage symptoms and prevent comorbidities in PwMS.

Acknowledgements

This study was performed on data collected as part of an ongoing study supported by an internal William P. Haas Grant conducted at The Joyce D. and Andrew J. Mandell Center for Comprehensive Multiple Sclerosis Care and Neuroscience Research at the Mount Sinai Rehabilitation Hospital, Trinity Health Of New England, and approved by the Trinity Health Of New England Institutional Review Board. Dr. Gromisch is a Harry Weaver Scholar of the National MS Society.

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