Considerations for Implementing a Health & Wellness Program for People with MS

Christine Manella, PT, LMT, MCMT[1], Deborah Backus, PT, PhD[1,2] and Blake Burdett, ES[1]

(1) Multiple Sclerosis Institute, Shepherd Center, Atlanta, GA, (2)Crawford Research Institute, Shepherd Center, Atlanta, GA

Introduction

Although current evidence suggests that regular exercise for people with Multiple Sclerosis (MS) is safe, [1-4,9] barriers such as inaccessible gyms or equipment, lack of knowledge about how to safely exercise with MS, lack of understanding about the types of exercise that would be beneficial, and financial concerns,[5-8] often limit their ability to participate in health and wellness programs. A program combining theories of physical therapy and exercise science was designed to provide financially feasible exercise and education options for people with MS. Characteristics of the program were defined after conduction of a focus group to determine the health and wellness needs of people with MS. Attendees identified the need for guided exercise groups with leaders educated in MS, as well as educational classes in symptom management, stress management and complementary /alternative options for treatment.

Methods

Participants were referred by facility clinicians or self referred from the local community.

The Exercise Program consisted of core strengthening, lower extremity strengthening and cardiorespiratory classes offered in a group setting with ≤ 5participants:1 exercise physiologist.

Outcome Measures were collected prior to initiating the program, and at six months post initiation of program in a subgroup of individuals (n=11 out of 61) to obtain pilot data for future grant applications and program development. Specific measures included those related to body composition, metabolic and cardiorespiratory function, strength and walking function.

Program funding was supported by membership fees paid by program members or by subsidized membership through the GA Chapter of the National MS Society (GNMSS) (see Table 1). Education classes were offered by current employees. Existing equipment and space in the in the rehabilitation gym was used for classes with the exception of a Theraband station (cost of $45). Membership fees covered 85% and donated funds covered 15% of the exercise physiologist salary.

Results

Most participants in this subgroup of 11 participants demonstrated improvement in health outcomes (Table 2) and strength and functional outcomes (Table 3).

Table 1: Funding information

Membership Fee	# of participants	Total Self Pay (amt, n)	GNMSS	Total Income to Program/Month	Total Income to Program/Year
$45.00	61	$585. 70	$2160.54	$2745.00	$32,940.00

Table 2: Participant Health Outcomes

Outcome	↑ or ↓	% change
Weight	↓	0.67
%Body Fat (BF) waist	↓	2.08
%BF hips	↓	2.7
%BF naval	↓	6.89
Total %BF	↓	0.82
Resting Metabolic Rate	↑	6.43
VO_2	↑	2.67

Table 3: Participant Strength/Function Outcomes

Outcome	↑ or ↓	% change
Hand Strength (Dynamometer)	↑	2.79
Abdominal Crunch	↑	53.67
Pull Up Test	↑	32.10
1RM Leg Press	↑	8.03
6 Min Walk Test	↑	14.58
10m Test	↓	12.54
TUG	↓	5.72

Conclusion

An outpatient MS exercise program may provide people with MS an alternative method for exercising that is feasible and viable in an outpatient setting. Minimal fund raising may be needed to support the program . Initial outcome measures show a positive effect in a subgroup of participants involved in classes guided by an instructor educated in MS. Further research is warranted and necessary.