Creighton UNIVERSITY

School of Pharmacy and Health Professions

Department of Occupational Therapy

Multiple Sclerosis Program: Avera Therapy

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BACKGROUND

Research suggests that persons with multiple sclerosis (MS) are much less physically active than the general population and that increased physical activity in persons with MS is associated with numerous benefits such as improvements in fatigue, mobility, and quality of life (Molt & Pilutti, 2012).

Individuals with MS also experience "paralysis of involved extremities, fatigue, cognitive impairment and psychological problems", which affects ones' occupational performance and social participation (Keller & Stone, 2009: Yu & Mathiowetz, 2014).

Avera McKennan Outpatient Therapy Services receives approximately 20 MS referrals each calendar year. However, the National MS Society rates a prevalence of 110-140 per 100,000 cases of MS in the northern hemisphere. This indicates that approximately 300 individuals are living with MS in the Sioux Falls, SD metro area. (Koskie, 2018)

Currently, there are no other exercise-based programs for individuals with MS or active MS support groups within a 100-mile radius of Sioux Falls, South Dakota (National Multiple Sclerosis Society, n.d.).

PROGRAM DETAILS

Weekly Exercise Classes

- Mondays and Wednesdays
- 11:45am-12:30pm; 12:15pm-1:00pm
- Classes divided on ability level (cap of 15)
- Strength training, aerobic exercise, stretching

MS and Caregiver Support Groups

- 2nd Monday of the month
- 1:00-2:00pm

3 Educational Series

- Topics: Cognitive Dysfunction in MS;
 MS Fatigue: Take Control; and Free from Falls
- Monday evenings, 5:30-6:30pm
- Each 4 weeks long

FOCUSED QUESTION

Will the development and implementation of a holistic approach multiple sclerosis program at Avera Therapy be feasible and sustainable while also better meeting the needs of this population?

METHODS

Grant: Therapists received an internal grant to fund first year expenses of MS Program including:

- Weekly exercise classes
- MS Support Group
- 3 Educational Series

Interviews: In person and phone interviews were completed to assess individuals interests and preferences for MS programming.

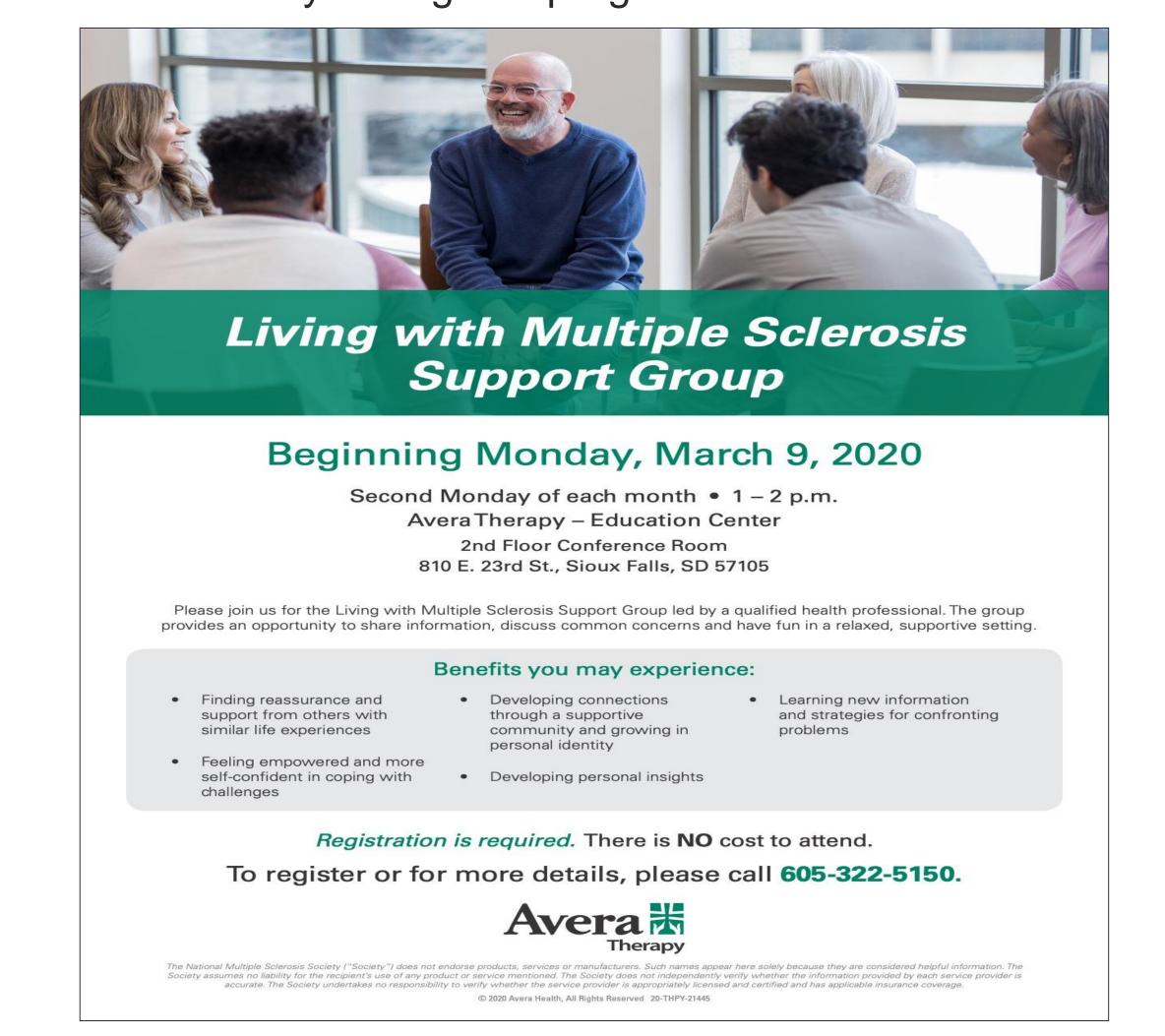
Research: Conference call with researcher Dr. Brad Bowser regarding MS and Exercise. Researched other existing exercise programs, support groups and MS programming in the United States.

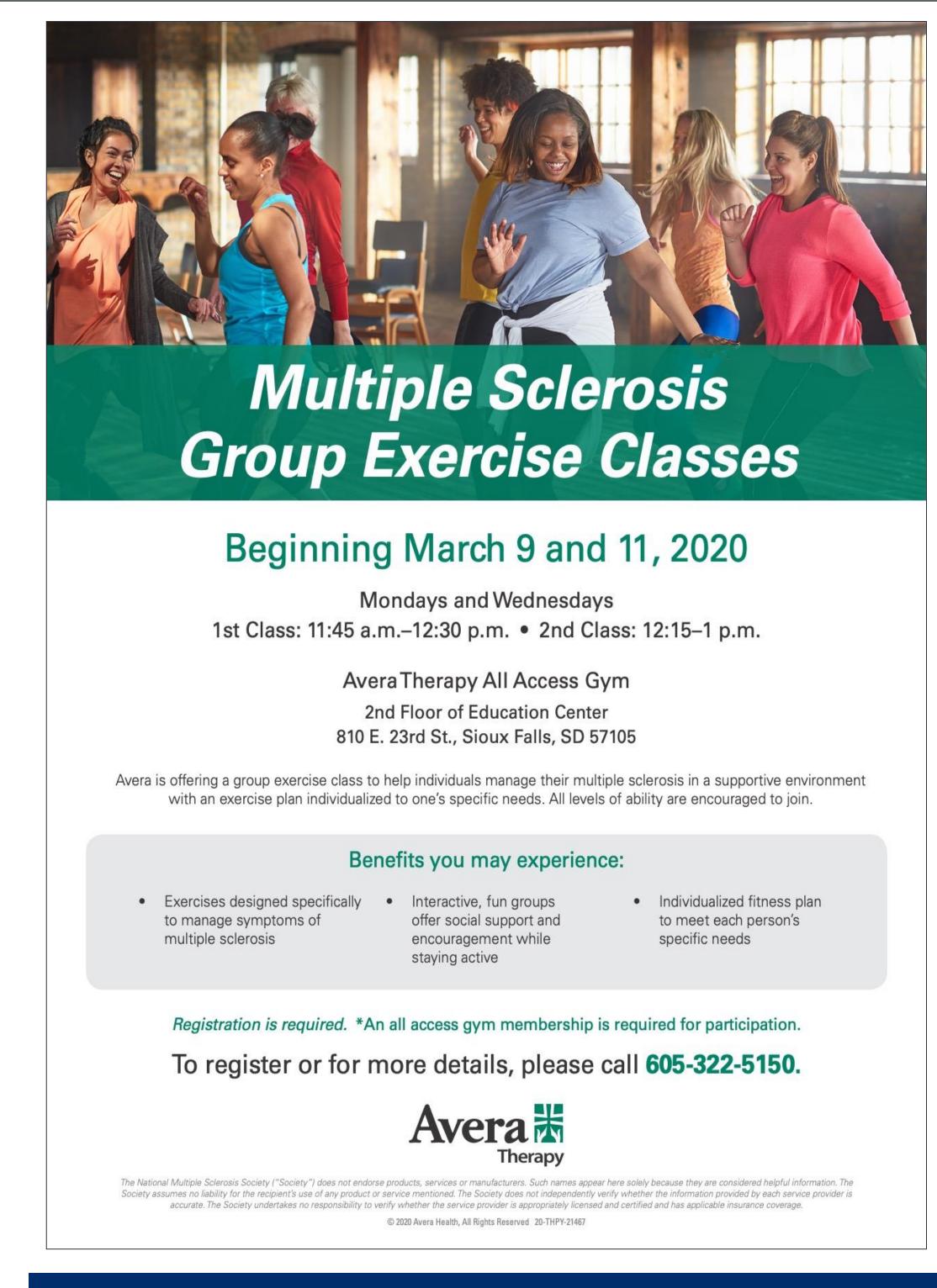
Marketing: Flyers, rack cards, email lists, calls to potential participants, Avera KnowledgeNet, luncheon with Avera Neurologists, National MS Society Event Calendar

Contacts:

- Partnered with Active Generations to begin and lead Caregiver Support Group
- Contacted individuals within Avera network to lead MS Support Group
- Followed up with potential participants known to Avera Therapy via email and phone calls
- Contacts made with National Multiple Sclerosis Society, Upper Midwest Chapter.

Questionnaires: The Modified Fatigue Impact Scale (MFIS) and Multiple Sclerosis Quality of Life Scale (MSQOL) were completed by participants prior to beginning MS Program. Therapists will use scales intermittently throughout program.





RESULTS

Exercise Classes: Two classes based on ability level, 2 days a week, began with total of 8 participants

MS Support Group: One time per month; began with 6 participants; awaiting commitment of qualified leader for group

Caregiver Support Group: One time per month; began with 2 participants

Educational Series: One time per week, 4 consecutive weeks, 7 registered participants for first series

Additional Referrals: Two new individuals to Avera Therapy began participating in MS Program events.

Questionnaires: Of the seven participants that completed the MSQOL scale, at baseline, each participant stated they felt either "mixed-about equally satisfied and dissatisfied" or "mostly satisfied" regarding their overall quality of life.

Limitations: Small beginning group sizes; unable to solidify a qualified professional from Avera to lead MS Support Group; Corona Virus put a hold on program and a hold on return of baseline questionnaires from participants; available hours of MS Program events was difficult for individuals who still work to attend.

BOTTOM LINE FOR OT

Through the development of a Multiple Sclerosis
Program including physical exercise classes,
psychosocial support groups, and occupational
performance educational series; occupational
therapists will better be able to ensure that individuals
with multiple sclerosis are treated holistically;
increasing their quality of life.

Recent research has indicated that regular strength and balance training, 2-3 times per week, improves speed of movement and quality of life in individuals with MS (B. Bowser, personal communication, February 13, 2020).

Additionally, a 10-week psychoeducational MS program based on the principles of the biopsychosocial model revealed improvements in depression, anxiety, overall mental health, perceived stress, and pain (McGuire, et al., 2015).

The Multiple Sclerosis Program will focus on the physical, emotional, and social well-being of individuals with multiple sclerosis; therefore, increasing their quality of life by maintaining their independence and participation in valued life roles.

REFERENCES

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