



RECOMMENDATIONS FOR FATIGUE, SPASTICITY, AND BALANCE

PROMOTING PHYSICAL WELL-BEING

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Objectives

- Participants will demonstrate:
 - ▣ Improved knowledge on managing fatigue
 - ▣ Improved knowledge on managing spasticity
 - ▣ Improved knowledge on balance training
 - ▣ Improved understanding about appropriate amounts of physical activity

- ▣ Increased confidence in incorporating strategies into regular routine

Fatigue

- 75-95% of people with MS experience fatigue.¹
- Various Causes of Fatigue
 - ▣ Secondary Fatigue: sleep disturbances, increased energy expenditure, physical deconditioning, medications.¹
 - ▣ Primary Fatigue: “MS Fatigue” (lassitude).^{2,3}
- Affects people differently

Fatigue Management

- Medications
- Energy Conservation
 - ▣ Simplifying tasks, assistive devices, time of day, prioritization- energy bank account
- Heat Management
 - ▣ Regulating body temp, cooling devices
- Other Considerations
 - ▣ Psychological interventions for stress and depression
 - ▣ Sleep regulation
 - ▣ Management of symptoms, e.g. spasticity

Fatigue Management, cont.

- Regular Exercise Program
 - ▣ Strengthening
 - Resistance (weights, theraband), or body weight
 - *Group Activity (standing/seated marches)*
 - ▣ Aerobic Exercise
 - Walking, swimming, cycling or “arm bike”, dancing

- Other Strategies?

Spasticity

- Involuntary muscle stiffness or spasms
- Affects up to 90% of people with MS. ⁴
- Effects of Spasticity
 - ▣ Negative effects: fatigue, mobility, pain, contracture
 - ▣ Positive effects: help with transfers, standing

Spasticity Management

- Medications
- Triggers of Spasticity
 - Stress
 - Fatigue
 - Sudden position changes
 - Temperature
 - Infections
- Positioning
 - Controlled position changes
 - Comfortable positioning

Spasticity Management, cont.

- Regular stretching and exercises
 - ▣ Hold stretches at least 30 seconds, daily
 - ▣ *Group Activity (hamstring stretch)*
 - ▣ Yoga and Tai Chi

- Other Strategies?

Balance

- Balance is complex:
 - Vestibular
 - Somatosensory
 - Vision
 - Strength
 - Cognition

- Issues will affect people differently – will affect what exercises to focus on

Balance Training- be safe!

- Vestibular:
 - ▣ Standing/walking with head turns in all 4 directions
- Somatosensory:
 - ▣ Standing/sitting on a pillow, uneven terrain, changing your “base of support”
- Vision:
 - ▣ Eyes open vs eyes closed

Balance Training

- Strengthening
 - Core
 - *Group Activity (seated reaching)*
 - Leg
- Other modifications:
 - Environment
 - Assistive Devices
- Aquatic Therapy/Exercises, Tai Chi, Yoga

Exercise Tips

- “All exercises should be a ‘challenge’, but *never* a ‘struggle.’”⁵
- Recommendations⁴:
 - 2-3 days a week
 - Strengthening: Goal of 8-15 reps in a set; Repeat 1-3 sets
 - Aerobic: Goal of 10-40 mins, with intermittent rest as needed
 - Stretching: Hold stretches for at least 30 seconds; Repeat 2 times
 - Balance
 - Moderate Intensity
 - Between “light” and “somewhat hard”
 - Noticeable increase in breathing
 - “Light”= conversation possible
 - “Somewhat hard”= conversation is more difficult
 - Rest Breaks
- **PT can be a resource for you when developing an exercise program!**

Exercise Tips, cont.

- Being tired and sore is not necessarily a bad thing
- 1 hour rule
 - ▣ If still exhausted after one hour, probably too much
- Core temp increases
 - ▣ May feel temporary increase in symptoms
- Exercise diary

- Motivational strategies?

Setting Goals!

- Remember:
 - ▣ Physical activity is beneficial
 - ▣ Incorporate what you love to do

- Refer to “Goals” Handout
 - ▣ How to set goals
 - ▣ 3 things learned from this presentation
 - ▣ 3 short term goals (1 week)
 - ▣ 3 long term goals (2-3 months)

If you hear a voice within you say “you cannot paint,” then by all means paint and that voice will be silenced.

- Vincent Van Gogh

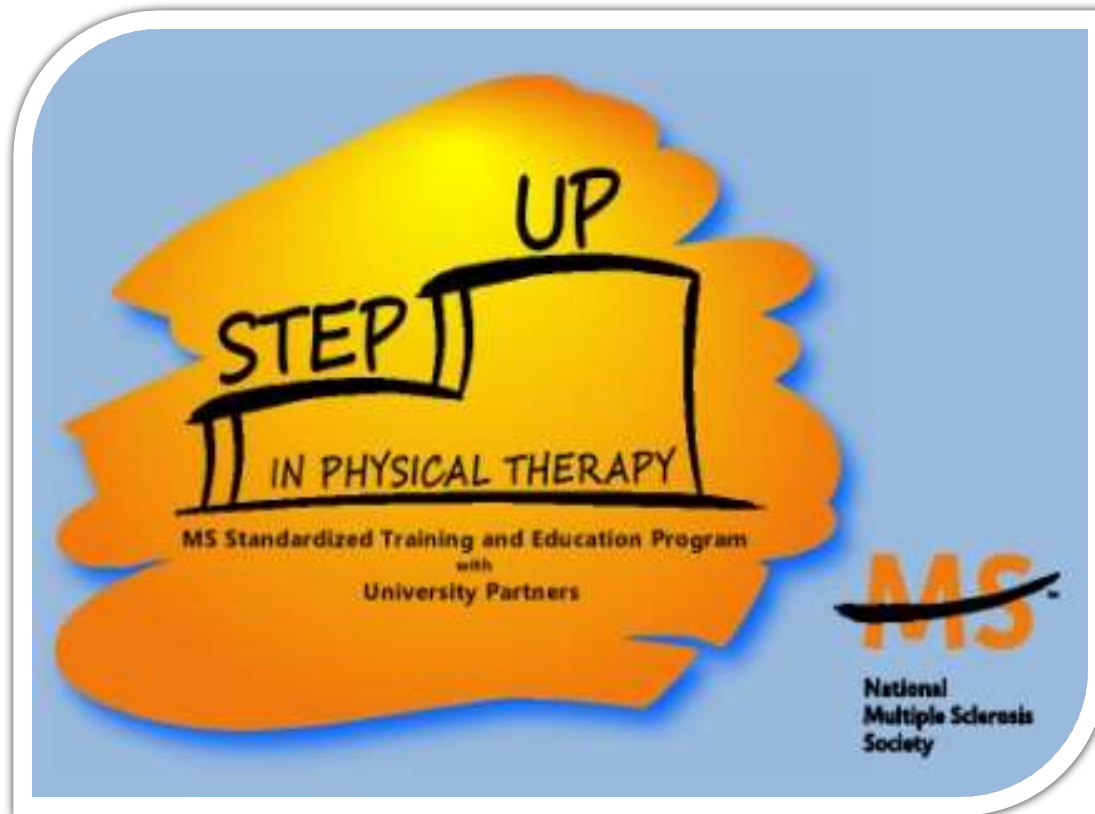
The only person you are destined to become is the person you decide to be.

- Ralph Waldo Emerson

Start where you are. Use what you have. Do what you can.

- Arthur Ashe

Questions?



References:

1. Applebee A. *MS Clinic Top 10 Questions*. [Powerpoint]. UVM College of Medicine; 2012.
2. Krupp LB. Fatigue in Multiple Sclerosis: Definition, Pathophysiology and Treatment. *CNS Drugs*. 2003;17(4):225-234.
3. NMSS. Fatigue. <http://www.nationalmssociety.org/Symptoms-Diagnosis/MS-Symptoms/Fatigue>. Accessed 2/26/14.
4. Döring A, Pfueller CF, Paul F, Dörr J. Exercise in multiple sclerosis- an integral component of disease management. *The EPMA Journal*. 2012;3(2):1-13
5. Provance PG. Physical Therapy in Multiple Sclerosis Rehabilitation. Clinical Bulletin: Information for Health Professionals. NMSS. 2011.