

Summary of the March 2008 Program

## Energy Conservation Techniques for Post-Polio Syndrome

By Wendy Boyher, OTR/L, Director of Rehab

Wendy Boyher is a Registered Occupational Therapist originally from New Brunswick, Canada. She graduated with a Bachelor of Science in 1994 and has been practicing in the United States for the past 12 years. She has been in skilled nursing at Timber Ridge for 6 years and Home Care for 6 years with Integrity Home Health Care. Wendy's role at Integrity is as an Occupational Therapist and the Director of Rehabilitation. She is married and has two children, ages 2½ and 5½, and lives in Southwest Ocala. Her passion is to work with the geriatric population and assist in improving people's independence and quality of care.

Wendy discussed the basic definitions of energy conservation starting with:

**ADL** - Activities of Daily Living. These describe tasks that are essential for self care including feeding, grooming, dressing, toileting and mobility/transferring.

**IADLs** - Instrumental Activities of Daily Living - Tasks that are essential for a person's participation in their social/physical environment including: home management-meal preparation, housekeeping, communication, money management, driving, work and leisure activities.

**MET LEVELS** - Metabolic Equivalent Levels - A measure of oxygen used by an individual participating in various activities while maintaining the body's metabolic processes including respirations, and body temperature.

Wendy discussed examples of Met levels associated with various activities starting with Minimal: rest, sitting at bedside, standing at bedside; Light: eating, getting in/out of bed, driving or propelling a wheelchair; Moderate: dressing, preparing meals, walking, and taking a warm shower; Heavy: having a bm, making the bed, golfing, walking downstairs and gardening. Severe: walking with braces or crutches, playing tennis, and scrubbing the floor. Excessively severe: mowing the lawn, climbing stairs rapidly and having sex.

Factors that can challenge cardiac output and increase energy requirements include: Performance speed, air temperature, emotional tension, use of assistive devices and locomotion problems.

Physical Therapy can offer the following assistance:

- Assess muscle strength and provide individualized home exercise programs.
- Exercise focusing on rebuilding muscle strength to facilitate independence with mobility and walking activities.
- Focusing on decreasing mechanical stress on joints and muscles.
- Pain reduction/management techniques.

- Instruction in the use of assistive devices (walker, wheelchair, power wheelchair, etc.)

## Energy Conservation Techniques

Definition: Techniques performed during daily activities reducing energy expenditures.

Without the use of these techniques, a person may run out of energy early in the day before they have finished the activities necessary for the whole day.

Therefore, this may increase the assistance required on a care-giver or if the person lives alone, may make further activities unsafe or medically compromised.

### Analyze

How much energy you have! What is your best time of day? What tasks do you have to do today?

### Prioritize

- Plan your day and establish a routine on what you can realistically accomplish during the day.
- Spread the more demanding tasks over the whole week.
- Leave enough time for various types of activities - REST, self care, leisure, REST, career, social activities, REST.
- Space tasks out during the day - example - you might get dressed in the morning and get a shower in the evening.
- Avoid unnecessary tasks.
- Eliminate trips during a task, gather all the necessary tools prior to starting.
- Keep items often used within reach and easily accessible.
- Use electric tools, such as electric toothbrush or can opener or mixer.

### Schedule Rest Breaks

AVOID stressful positions or situation, a hot/humid environment, quick temperature changes, reaching above the head or bending at the waist, isometric contractions, such as pulling/pushing that may cause breath holding, exertion after meals and excessive bilateral extremity use. Upper extremity use exerts more energy on the cardiovascular system than the lower extremities.

Wendy gave examples of the following:

### Self Care Tasks

- Dress upper body first, then lower body after a short rest.
- Use adaptive equipment when necessary to avoid bending or reaching.
- When transferring, use a sliding board to scoot instead of using arms.

- Avoid really hot showers.

### **Instrumental ADLs**

- Use adaptive devices to open tight jars
- Lighten loads when doing laundry
- Slide items along the counter top instead of carrying across kitchen
- Use a rolling cart to gather all necessary items to avoid multiple trips
- Soak dirty dishes before washing them
- Use your foot to close a cupboard door instead of bending over
- MAINTAIN normal body weight - Why? Extra body weight can produce more cardiovascular demands.
- MAINTAIN emotional levels - Remember, emotion exerts energy too!
- MAINTAIN good body mechanics during all activities.

After the program, Wendy showed us some assistive devices that can be purchased to help us do daily activities easier. She also answered questions. We thank her for a very informative program.

**Summarized by Sharon Daszczyński**