

MINIMIZING YOUR RISK OF FALLS

Theresa Craig BS, CES

Allied Services Integrated Health System

Michael J. Aronica, MD Wellness Center

MINIMIZING YOUR RISK FOR FALLS

- MS and Falls
- How does MS affect your balance?
- What factors increase your risk of falls?
- Fall Prevention Strategies
- Having a plan if you should fall

MS AND FALLS

- Research has shown an increased prevalence of falls in individuals with MS
- May cause significant long-term injuries
- Increased cost of medical care
- Loss of self-confidence
- Decreased quality of life
- Social isolation

THE EFFECTS OF MS ON BALANCE

- Damage to the myelin in the central nervous system and nerve fibers within the body interfere with the transmission of nerve signals
- Symptoms vary but may include:
 - Muscle weakness
 - Spasticity
 - Fatigue
 - Numbness
 - Vision problems
 - Pain
 - Dizziness/Vertigo

THE EFFECTS OF MS ON BALANCE (CONT.)

- Symptoms include changes in the sensory, motor and cognitive systems of the body which affect our balance
- Decreased visual acuity and depth perception may lead to difficulty negotiating curbs or stairs
- Impaired sensory and vestibular systems result in joint instability, decreased ability to walk on an uneven terrain, and frequent feeling of unsteadiness or dizziness

THE EFFECTS OF MS ON BALANCE (CONT.)

- Decreased muscular strength, endurance and flexibility result in increased fatigue, an inability to adapt to changing environments and slower reaction and movement time
- Decreased ability to reason and problem solve affects the ability to assess sensory input and generate appropriate responses

RISK FACTORS

- **Biological**
- **Behavioral**
- **Environmental**

RISK FACTORS-BIOLOGICAL

- **Muscle imbalances**
- **Vestibular/Sensory problems**
- **Fatigue**
- **Heat Intolerance**
- **Vision problems**
- **Pain**
- **Cognitive changes**
- **Bowel/Bladder dysfunction**
- **Medications**

RISK FACTORS-BEHAVIORAL

- Inactivity
- Fear of Falling
- Overconfidence
- Inability to manage energy or assess a high-risk situation

RISK FACTORS-ENVIRONMENTAL

- Home Safety
 - Lighting
 - Clutter
 - Flooring
 - Clear pathways
 - Storage
 - Aids for standing/sitting/performing tasks

RISK FACTORS-ENVIRONMENTAL (CONT.)

- **Safety in the community**
 - Walking surfaces
 - Wet
 - Uneven
 - Slippery
 - Lighting
 - Obstructed pathways
 - Crowds

FALL PREVENTION STRATEGIES

- **Optimize your mobility**
 - Manage fatigue/energy levels throughout the day
 - Assistive devices
 - Cooling strategies
- **Exercise**
 - Strength/Endurance
 - Flexibility
 - Balance/Coordination
 - Core

FALL PREVENTION STRATEGIES (CONT.)

- Increase your awareness of risks in the home and community
- Achieving a thoughtful response when adapting to different situations

- **STOP!**
- **SCAN**
- **PLAN**

TIPS FOR STAYING SAFE AT HOME

- Look at each room
- Install lever door handle hardware
- Proper lighting
 - Accesible light switch
 - Use a flashlight, nightlight or motion-sensored light
- Flooring
 - Avoid loose rugs
 - Use non-skid pads where flooring may get wet

TIPS FOR STAYING SAFE AT HOME (CONT.)

- **Stairways**
 - Handrails
 - Broken/uneven steps
 - Ramps
- **Avoid high storage areas**
- **Clear pathways**
 - Reducing clutter
- **Exposed wires or cords**
- **Place chairs near work surfaces in case a rest is needed**
- **Use a shower chair, handrails in the bathroom**

TIPS FOR STAYING SAFE IN THE COMMUNITY

- **Use assistive devices**
- **Uneven surfaces**
- **Wet/Slippery surfaces**
 - Proper footwear
 - Slow, small strides
- **Poorly lit areas**
 - Use proper eyewear
 - Move slowly
- **Avoid pathways with obstacles/crowds**

HAVING A PLAN IF YOU SHOULD FALL

- **Before you get up**
 - Assess your injuries
 - Call for help/assistance if necessary
- **Practice getting up safely**
 - In the home
- **Preparing an emergency response plan**
 - Have a phone with you
 - Keep a list of emergency contacts and important health information
 - Utilizing a personal response system
 - Contact your physician

REFERENCES

- **Free From Falls: The National MS Society's Comprehensive Fall Prevention Program**
- **Finlayson ML, Peterson EW, Cho CC.**
- **Risk factors for falling among people aged 45 to 90 years with multiple sclerosis. Arch Phys Med Rehabil 2006;87:1274-9.**