



**MS Fatigue Management** 

Hosted by BC & Yukon Division

Thursday, November 3, 2016

6:00-7:30 pm (PST)











The MS Society, BC & Yukon Division gratefully acknowledges the educational grant received from Biogen which makes possible the **MS Fatigue Management** session. The MS Society does not approve, endorse or recommend any specific product or therapy but provides information to assist individuals in making their own decisions.

Identification of needs, determination of objectives, selection of content and speakers, educational methods and materials are the sole responsibility of MS Society staff and advisors.

Biogen.



### MS Society of Canada

 Mission Statement: To be a leader in finding a cure for multiple sclerosis and enabling people affected by MS to enhance their quality of life.



#### **DENISE KENDRICK**

- A Graduate of the Master of Occupational Therapy program from the Department of Occupational Science & Occupational Therapy at UBC.
- Began her career working in acute care and took on roles throughout this time to support the practice of other Occupational Therapists. This is where she developed her interest in teaching and program development and strived to provide improved Occupational Therapy services.
- Took on the role of developing student-led Occupational Therapy services in the UBC MS Clinic in 2014 and saw this as an opportunity to deliver evidence-based programs to address the impact of common symptoms of MS on daily function.
- Denise and her students build their programs upon the principles of selfefficacy to provide clients with the tools and strategies needed to effectively self-manage. Presently, programs to address fatigue, hand function, tremor and cognitive impairment are in development to minimize the impact these symptoms have on clients' daily function.
- Considers herself lucky to have the opportunity to learn something new from her clients every day.





## Managing your fatigue

Denise Kendrick
Occupational Therapist
UBC MS/NMO Clinic, Vancouver











#### Outline

- What is fatigue?
  - Definition
  - Fatigue facts
  - Types of fatigue
- Your fatigue management team
- Assessment of fatigue
- Managing fatigue
  - Maximizing energy
  - Using energy conservation
- Questions



#### What is fatigue?

"A subjective lack of physical and/or mental energy that is perceived by the individual or caregiver to interfere with usual or desired activities." \*

<sup>\*</sup> Fatigue and Multiple Sclerosis: Evidence-Based Management Strategies for Fatigue in Multiple Sclerosis, Paralyzed Veterans of America



# How people describe their fatigue:

"It reminds me of falling into quicksand/a swamp - it's a viscous, heavy, pulling feeling, but if I try to fight it, it hurts like hell and robs me of breath."

"Fatigue feels like being weighed down, as if you are trying to walk up to your neck in a deep, muddy river in heavy, wet clothes carrying shopping bags full of rocks."

"Fatigue leaves me feeling dulled and tired. I find it hard to concentrate and to absorb new ideas, and I'm often confused, searching for the right word, and forgetting things."

Quotes taken from the MS Trust book Living with fatigue



#### Fatigue Facts

- 75-95% of people with MS experience fatigue
- 50-60% report fatigue as one of their worst problems
- Fatigue affects people differently
- Fatigue severity unrelated to disease process (e.g. lesion burden, EDSS)
- Fatigue may worsen other symptoms



## Fatigue Facts

- a major reason for unemployment
- usually multifactorial
- out of proportion to the activity
- an "invisible" symptom
- changing and can fluctuate



### Your Fatigue Team

- Neurologist
- Family physician
- Nurse
- Occupational Therapist
- Physiotherapist
- Social Worker
- Support network (i.e. family and friends)
- Employer



### Fatigue Assessment

- Description of fatigue
  - Consider using a tracking tool
- Measures: CFAB-MS, MFIS, FSS, mobility screen, sleep questionnaire, mood screen
- Identify
  - Other medical conditions
  - Medications
  - Sleep, depression
  - Mobility



## Sample Tracking Tool

6:00-7:00	4	Woke up, ate breakfast	Home	Alone
7:00-8:00				
8:00-9:00				
9:00-10:00				
10:00-11:00				
11:00-12:00				
12:00—1:00				
1:00-2:00				
2:00-3:00				



### Treating Fatigue

Two-pronged approach =

- 1. Maximizing energy
- 2. Using energy efficiently (energy conservation)

National Institute for Health and Care Excellence (NICE) Guideline for the Management of MS fatigue (2014):

- Assess and treat anxiety, depression, difficulty sleeping and any medical problem (i.e. anemia or thyroid disease)
- ✓Offer amantadine
- Consider mindfulness-based training, cognitive behavioural therapy or fatigue management
- Advise people that aerobic, balance and stretching including yoga may be helpful



### Types of Fatigue

- Acute vs chronic fatigue
- Primary vs secondary fatigue
- Physical, cognitive and emotional fatigue



## Acute vs Chronic Fatigue

- Acute fatigue = new or noticeably worse fatigue, in the last 6 weeks
- Chronic fatigue = lasts for longer than 6 weeks, more than 50% of days, during some part of the day



## Primary vs Secondary Fatigue

- Primary (MS-related) fatigue = due to the disease process itself, diagnosis of elimination
- Secondary (non-MS related) fatigue = fatigue arising from secondary factors:
  - Poor sleep
  - Mobility problems
  - Depression and anxiety
  - Stress
  - Inadequate nutrition
  - Lack of physical activity
  - Heat
  - Medications



# Prevalence Factors Contributing to Fatigue

	<u>n (%)</u> 1	<u>n (%)</u> ²
Non-MS fatigue-ACUTE	4 (8%) -	
Non-MS fatigue-CHRONIC	36 (72%)	945 (74%)
<ul> <li>Sleep problems</li> </ul>	29 (58%)	313 (25%)
<ul> <li>Depression</li> </ul>	20 (40%)	567 (44%)
<ul> <li>Medications</li> </ul>	10 (20%)	105 (8%)
<ul> <li>Deconditioning</li> </ul>	10 (20%) -	
<ul> <li>Significant chronic stressors</li> </ul>	3 (6%)	255 (20%)
<ul> <li>Concomitant medical problems</li> </ul>	2 (4%)	181 (14%)
Secondary MS fatigue	26 (52%)	282 (22%)
<ul> <li>Unmanaged mobility impairment</li> </ul>	26 (52%)	282 (22%)
<ul> <li>Respiratory problems</li> </ul>	2 (4%) -	,
Primary MS fatigue 14 (28%)		335 (26%)

Forwell et al (2008)<sup>1</sup>; Stewart et al (2007)<sup>2</sup>



#### Types of MS-related Fatigue

- Physical/motor fatigue central vs peripheral neuromuscular fatigue from 'short-circuiting' in nerve messages to muscles
- Cognitive fatigue –ability to think becomes difficult as cognitively demanding tasks progress; "brain fog"
- Emotional fatigue can manifest as frustration, decreased motivation, loss of pleasure



# Maximizing Energy - Treating Secondary Factors

- Initial treatment of fatigue involves treating:
  - Poor sleep
  - Low mood, depression or anxiety
  - Inadequate nutrition
  - Lack of physical activity
  - Heat
  - Pain
  - Medications



#### Sleep Issues in MS

- Restless leg syndrome
- Sleep disordered breathing
- Insomnia due to:
  - Pain
  - Spasticity
  - Depression
  - Anxiety
  - Nocturia
  - Medication effects
    - \*\* address these with your MS nurse or physician



#### Managing Sleep

- Keep regular sleep hours
- Avoid being over-tired
- Avoid activities other than sleep and intimacy in the bedroom
- Stay active, but avoid exercise in evening
- Prior to bed, avoid:
  - x Stimulants (caffeine and nicotine)
  - x Excessive alcohol
  - x Large meals
  - x Mentally taxing activities
  - x Computer/smartphone
- Develop a bedtime routine, take a bath, read etc.
- Reduce noise and light in bedroom
- Use relaxation exercises



#### Making the Most of a Nap

- Naps are helpful only if they don't interfere with nighttime sleep
- Where: a sofa, recliner, a bed
- How often: one to three times per day
- ▶ How long: 10–30 minutes
- HELPFUL HINTS:
  - Loosen tight clothes
  - Turn TV and music off
  - Dim the lights
  - Close curtains or blinds



#### Sleep Resources

National Sleep Foundation

www.sleepfoundation.org

Canadian Sleep Society

www.css-scs.ca



#### Mood

- Low mood or depression can increase fatigue
- Up to 54% of people with MS experience depression
- Depression can be a symptom of MS, or a reaction to an illness
- When depression is treated, fatigue decreases by 50%
- Seek help from your family physician to address your mood
- To address low mood:
  - Exercise regularly
  - Spend time with positive people
  - Address your worries as they arise
  - Seek support from family/friend or professional



#### **Nutrition**

- Avoid sugary foods
- Add protein
- Never go longer than 4 hours without food
- Shrink meals to eat more often; avoid large portions
- Avoid too much caffeine
- Stay hydrated



#### Nutrition Resources

- National MS Society Food for Thought
- MS Society Healthy Eating: A Guide for People with MS
- Canada's Food Guide
- Ontario 1-877-510-5102
- British Columbia 8-1-1
- Manitoba 1-877-830-2892



## Food Preparation Tips

- Organize the kitchen so things are within reach
- Keep kitchen cool
- Cook when energy is high
- Sit rather than stand
- Get all ingredients together before starting
- Use appliances such as mixers
- Use ready prepared foods
- Keep heavy items in fridge within easy reach
- Soak dishes to avoid scrubbing



## Benefits of Exercise

- No single "right exercise"
- Improves daily activity performance
- Improves mood, self-esteem and self-efficacy
- Ignore "no pain, no gain"
- Manage heat
- Pace yourself
- Use everyday activities as exercise
- Ask about discount at community centres
- Research for:
  - Vestibular training
  - Treadmill training
  - Elliptical exercise



#### Canadian Physical Activity Guidelines

#### FOR ADULTS WITH MULTIPLE SCLEROSIS

#### Guidelines

To achieve important fitness benefits, adults aged 18-64 years with multiple sclerosis who have mild to moderate disability need at least:



 30 minutes of moderate intensity aerobic activity, 2 times per week, AND



Strength training exercises for major muscle groups, 2 times per week.



Meeting these guidelines may also reduce fatigue, improve mobility and enhance elements of health-related quality of life.

#### Who are the Guidelines for?

 These guidelines are appropriate for adults (aged 18-64 years) with minimal to moderate disability resulting from either relapsing remitting or progressive forms of multiple sclerosis

#### **Getting Started**

- You may wish to speak to a health professional to find out what types and amounts of physical activity are appropriate for you.
- A health professional might include a doctor, a physiotherapist, or a qualified exercise professional.
- If you are are physically inactive, activities performed at a lower intensity, frequency, and duration than recommended may bring some benefit.
- Gradually increase duration, frequency, and intensity as a progression towards meeting the guidelines.

Now is the time. Walk, run, or wheel, and embrace life.









#### Exercise Resources

- MS GetFit Toolkit: MS Society of Canada
- Exercises for people with MS: MS Trust





### Mobility

 Use of gait aids, such as bilateral walking poles reduce energy needed to walk

 Physiotherapists assess whether inefficient mobility is contributing to fatigue and recommend appropriate gait aids

 Consider using a parking permit for persons with disabilities



### Managing Heat

- Hot showers, weather, drinks or meals can trigger fatigue
- Keep core body temperature from rising by:
- Drinking cool liquids and stay hydrated
- Avoiding outdoor exercise in hot climate
- Using cooling equipment





#### Pain

- As high as 65% of people with MS experience pain
- Pain interferes with sleep
- Pain is exhausting
- Management of pain leads to improved quality of life and productivity

#### Resources:

Pain BC

**Canadian Pain Coalition** 



#### Medications



- Discuss all medications with neurologist, family physician or pharmacist, including:
  - Prescription medications
  - Vitamins and supplements
  - Recreational drugs
  - Alcohol consumption
- Side effects of some medications used to treat MS symptoms can cause fatigue (e.g. medications for spasticity, nerve pain)



# Benefits of Relaxation Techniques

- Slows heart rate
- Lowers blood pressure
- Slows rate of breathing
- Reduces stress hormones
- Increases blood flow to major muscles
- Reduces muscle tension and chronic pain
- Improves concentration and mood
- Reduces fatigue
- Promotes good sleep
- Reduces anger and frustration
- Boosts confidence to handle problems



# Relaxation Techniques

- Meditation
- Body awareness
- Deep breathing
- Visualisation techniques
- Muscular relaxation
- Music or meditative sounds
- Massage
- Yoga, tai-chi and pilates





## Time to Practice!

https://www.dartmouth.edu/~healthed/relax/downloads.html#deep



take a deep breath.



## Medications

<b>Generic Name</b>	Brand Name	Use
amantadine	Symmetrel	Antiviral; alters dopamine levels
modafinil	Alertec	CNS stimulant; used to treat daytime sleepiness in Narcolepsy
methylphenidate	Ritalin	CNS stimulant; typically used to manage Attention Deficit Disorder in children
antidepressants	e.g. Wellbutrin	May help manage both depression and fatigue, which often occur together



# Behavioural Approaches



"What if we don't change at all ... and something magical just happens?"



## 4P's

- Planning
- Prioritizing
- Pacing
- Positioning



## **Planning**

- Think ahead
- Make friends with technology
- Plan for outings to avoid unnecessary stress
- Keep multiples of frequently used items to avoid trips
- Plan for meals and grocery shopping
- Cook larger meals to have leftovers
- Plan for higher energy activities at higher energy times of day
- Build in extra time between activities



## There's an App for That!

- Remember the Milk organizes your to-do lists so you can prioritize, set reminders etc.
- Evernote takes notes, screenshots, records audio and indexes it
- Cozi calendar feature that sync's family schedules and sends reminders for appointments





## **Prioritizing**

- Make a list of your activities, rank them, ask yourself...
  - What do I enjoy?
  - What has to be done today, or this week?
  - How often do these have to be done?
  - Do I have to do these myself?
  - Are my expectations of myself realistic?
  - What do others expect of me?



\*\* Consider putting all items in categories of <u>need</u> to do, <u>want</u> to do and <u>should</u> do\*\*



## **Prioritizing**

- Remember, independence doesn't mean doing everything yourself:
  - Grocery delivery services
  - Online banking
  - Online shopping
  - Delegate household chores
  - Hire a housekeeper



# Energy Analogies

### **Energy Bank Account**

### The Spoon Theory







- Consider the "2 hour rule"
- Balance activities that are physically, cognitively and emotionally taxing
- Learn to recognize times of day that you are fatigued and plan for rest prior to these
- Plan for leisure activities
- Pace all activities
- Avoid doing several things at once
- Don't feel obligated to finish a task all at once

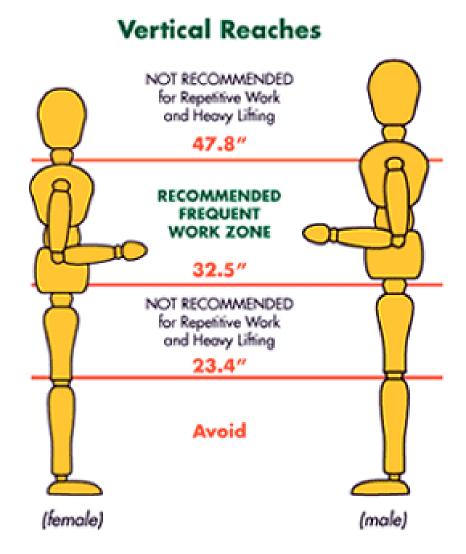


## **Positioning**

- Use your physical energy in the most efficient way
- Consider body mechanics
  - Position self close to objects
  - Maintain vertical line of gravity
  - Use big muscles rather than small
  - Avoid frequent bending and turning
  - Know your limits and seek assistance

#### Examples:

- Use a shower chair
- Sit while doing meal prep
- Use a telephone headset

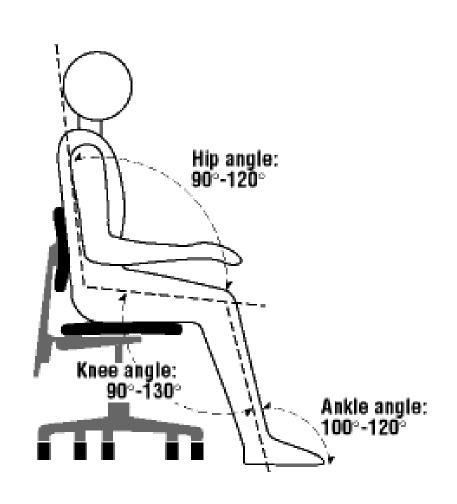




# Managing Fatigue at Work

- Consider requesting an ergonomic assessment
- Request accommodations as needed, these may include:
  - A designated quiet space with recliner chair or couch
  - A modified work schedule
  - Taking shorter, more frequent breaks
  - Avoiding heavy duties
  - Using a headset
  - Working from home

Resources: MS Society of Canada: MS in the Workplace; MS clinic Social Worker/OT





# Energy Management Programs

Fatigue: Take Control (Copperman & Hugos, 2005)

- Produced through the National MS Society
- Group leader & participant workbook
- Five 15-25 minute videos
  - Video One: Medical Management of Fatigue
  - Video Two: Activity Diary, Cognitive Fatigue, Heat Sensitivity, Efficient Diet and Meal Preparation, Goals and **Priorities**
  - Video Three: Exercise
  - Video Four: Changes at Home/Work, Gait and Mobility Issues
  - Video Five: Energy Conservation: Posture, Ergonomics, Analyzing and Modifying Activities

# Energy Management Programs

# Energy Management for Restoration and Renewal – MS (EMPIRE-MS) \*\*pending research

- Developed by Dr. Susan Forwell
- Group leader & participant workbook
- Four 2-hour sessions
- > Content includes:
  - Normal/abnormal fatigue
  - Energy expenditure self-analysis; rest:activity ratio self-analysis
  - Energy management strategies including: sleep hygiene, planning & prioritizing, ergonomic evaluation, naps vs daytime sleep, relaxation training, social life and communication, stress busters, exercise, equipment and technology, general health



## References

- Bol Y, Smolders J, Duits A, Lange I, Romberg-Camps M, Hupperts R. Fatigue and heat sensitivity in patients with multiple sclerosis. ActaNeurologicaScandinavica 2012;126(6):384-389
- Ennis, Michelle & Webster, Simon. (2015). Living with fatigue: fatigue management for people with MS. Multiple Sclerosis Trust.
- Forwell SJ,Brunham S, Tremlett H, Morrison W, Oger J. Differentiating primary and non-primary fatigue in MS. International Journal of MS Care. 2008;10 (1): 14-20.
- Hebert, J. R., Corboy, J. R., Manago, M. M. & Schenkman, M. (2011). Phys Therapy, Aug;91(8):1166-83
- + Huisinga, J. M., Filipi, M. L. & Stergiou, N. (2011). J Rehabil Research Development, 48(7):881-90
- Mathiowetz VG, Finlayson ML, Matuska KM, Chen HY, Luo P. Randomized controlled trial of an energy conservation course for persons with multiple sclerosis. Multiple Sclerosis. 2005; 11(5): 592-601.
- Stewart TM, Tran ZV, Bowling A. Factors Related to Fatigue in Multiple Sclerosis. International Journal of MS Care 2007; 9(2): 29-34.
- Pilutti, L.A., Lelli, D. A., Paulseth, J.E., Crome, M., Jiang, S., Rathbone, M. P. & Hicks, A. L. (2011). Effects of 12 weeks of supported treadmill training on functional ability and quality of life in progressive mutiple sclerosis: a pilot study. Arch Phys Med Rehabil, 92(1), 31-6.
- Filion, Marie-Jose. (2005). Some guidelines on saving energy for people with multiple Sclerosis: Multiple Sclerosis Society of Canada; Quebec Division.
- Bakshi R. Fatigue associated with multiple sclerosis: Diagnosis, impact and management. Multiple Sclerosis. 2003;9:219-227.
- World Health Organization. International Classification of functioning, disability, and health. Geneva: World Health Organization; 2001
- Olsson M, Lexell J, Söderberg S. The meaning of fatigue for women with multiple sclerosis. Journal Of Advanced Nursing 2005;49(1):7-15.
- Braley, T. F. & Chervin, R.D. (2010). Fatigue in multiple sclerosis: mechanisms, evaluation and treatment. Sleep, 33(8), 1061-1067.
- Stuifbergen A, Rogers S. The experience of fatigue and strategies of self-care among persons with multiple sclerosis. Applied Nursing Research 1997;10(1):2-10.
- Motl R, McAuley E, Snook E. Physical activity and quality of life in multiple sclerosis: Possible roles of social support, self-efficacy, and functional limitations. Rehabilitation Psychology. 2007;52(2):143-151.
- Hugos, Copperman, Fuller, Yadav, Lovera & Bourdette (2010). Clinical trial of a formal group fatigue program in multiple sclerosis. <u>Mult Scler.</u> Jun;16(6):724-32.
- Lobentanz I, Asenbaum S, Zeitlhofer J, et al. Factors influencing quality of life in multiple sclerosis patients: disability, depressive mood, fatigue and sleep quality. Acta Neurologica Scandinavica. 2004;110(1):6-13.
- Flensner G, Ek AC, Söderhamn O. Lived experience of MS-related fatigue—a phenomenological interview study. International Journal of Nursing Studies 2003; 40(7):707-717.
- Dhand R, Sohal H. Good sleep, bad sleep! The role of daytime naps in healthy adults. Current Opinion in Pulmonary Medicine. 2006; 12:378-382.
- Better Sleep Council Canada: [homepage on the Internet]. Better Sleep Council Canada; c2006 [cited 2011 Mar 15]. Available from: http://www.bettersleep.ca.



## References

- National Institute for Health Care and Excellence. Multiple sclerosis in adults: management clinical guideline [CG186] Published date: October 2014.
- American Sleep Association. [homepage on the Internet]. c2002-2010. [updated May 2007; cited 2011 Mar 15]. What is Sleep? Available from: <a href="http://www.sleepassociation.org/index.php?p=whatissleep.">http://www.sleepassociation.org/index.php?p=whatissleep.</a>
- Marrie, RA, &Hanwell, H. General health issues in multiple sclerosis: comorbidities, secondary conditions, and health behaviours. CONTINUUM: Lifelong Learning in Neurology. 2013; 19(4, Multiple Sclerosis): 1046-1057.
- Johnson, KL, & Fraser, RT. Mitigating the impact of multiple sclerosis on employment. Physical medicine and rehabilitation clinics of North America. 2005; 16(2): 571-582.
- Packer TL, Brink N, Sauriol A. Managing fatigue: a six week course for energy conservation. Tucson, Arizona: Therapy Skill Builders; 1995.
- Finlayson, M, editor. Multiple sclerosis rehabilitation: from impairment to participation. Boca Raton: FLTaylor& Francis Group; 2013.
- Mayo Clinic [homepage on the Internet]. Mayo Foundation for Medical Education and Research; c1998-2011. [updated 2011May 19; cited 2011 Dec 5]. Relaxation techniques: Try these steps to reduce stress. Available from: <a href="http://www.mayoclinic.com/health/relaxation-technique/SR00007">http://www.mayoclinic.com/health/relaxation-technique/SR00007</a>.
- Nowack DM [Internet]. National MS Society; c2012. [updated 2012; cited 2015 Mar 18]. Food for thought: MS nutrition. Available from: <a href="http://www.nationalmssociety.org/NationalMSSociety/media/MSNationalFiles/Brochures/Brochure-Food-for-Thought%E2%80%94MS-and-Nutrition.pdf">http://www.nationalmssociety.org/NationalMSSociety/media/MSNationalFiles/Brochures/Brochure-Food-for-Thought%E2%80%94MS-and-Nutrition.pdf</a>
- Schwarz S, Leweling H. Multiple sclerosis and nutrition. Multiple Sclerosis. 2005;11:24-32.
- Petajan J, Gappmaier E, White A, Spencer M, Mino L, Hicks R. Impact of aerobic training on fitness and quality of life in multiple sclerosis. Annals
  of Neurology 1996;39:432-441.
- MS Society of Canada [homepage on the internet]. MS Society of Canada; c2015 [updated 2015; cited 2015 Mar 20]. The guidelines. Available from: https://beta.mssociety.ca/living-with-ms/programs-and-services/recreation-and-social-programs/physical-activity/the-guidelines
- Harmon M [Internet] National MS Society; c2014 [updated 2014; cited 2015 Mar 20]. Exercise as part of everyday life. Available from: http://www.nationalmssociety.org/NationalMSSociety/media/MSNationalFiles/Brochures/Brochure-Exercise-as-Part-of-Everyday-Life.pdf
- Ehde DM, Osborne TL, Hanley MA, Jensen MP, Kraft GH. The scope and nature of pain in persons with multiple sclerosis. Multiple Sclerosis. 2006;12:629-638.
- Chwastiak L, Ehde D, Gibbons L, Sullivan M, Bowen J, Kraft G. Depressive symptoms and severity of illness in multiple sclerosis: Epidemiologic study of a large community sample. American Journal of Psychiatry. 2002;159:1862-1868.
- Siegert R, Abernethy D. Depression in multiple sclerosis: a review. Journal Of Neurology Neurosurgery And Psychiatry. 2005;76:469-475.
- Mohr DC, Hart SL, Goldberg A. Effects of treatment for depression on fatigue in multiple sclerosis. *Psychosomatic Medicine*. 2003;65(4):542-547.



# MS. Questions?





# For Further Information Please Contact

**MS** Navigators

1-844-859-6789

BC and Yukon Division Office

604-689-3144/1-800-268-7582

www.mssociety.ca

Email: info.bc@mssociety.ca



Like us on Facebook!