One of the challenges of managing multiple sclerosis (MS) is helping the patient to adjust to relapses after a period of disease remission. MS Exchange asked Dr. Michael M.C. Yeung, Director of MS Clinical Trials Research Unit at the University of Calgary in Calgary, Alberta, Canada, to help identify what constitutes a relapse.

**MS Exchange:** Once a patient has been diagnosed with MS and initially treated, how likely is relapse to occur? Are there patterns regarding frequency?

**Dr. Yeung:** Natural history studies have shown a mean annual frequency of 0.4–1.1 relapses per patient per year. This rate may depend upon the age and type of patient population, duration of disease, and frequency of follow-up. The relapse rate may decrease with duration of disease. More frequent follow-up may show an increase in number of relapses because patients are reminded to keep track of events. Relapses may be more frequent during the spring and summer. Relapses may also be more frequent postpartum, and less frequent during the second and third trimesters of pregnancy. Some women note an increase in relapses or symptoms around menstruation.

**MS Exchange:** When relapse occurs, how is this measured?

**Dr. Yeung:** According to Poser, a relapse must include one or more neurologic symptoms, must last more than 24 hours, and must not be secondary to a metabolic change such as fever. Recent randomized clinical trials of new therapies have required that symptoms last at least 48 hours and be accompanied by an objective change on neurologic examination, but this may not be useful criteria in clinical practice. Most relapses have a subacute onset over several days, and most remit within 1 to 3 months. Ideally, relapses or possible relapses should be evaluated by a clinician to confirm the relapse; often this is not feasible in clinical practice, and some patients prefer to “ride out” their relapse.

The Expanded Disability Status Scale (EDSS) can be used to document a change in the neurological exami-
nation. Within the EDSS are functional system scores (FSS). In clinical trials, relapses are measured by defined changes in the EDSS or within a particular FSS.

**MS Exchange:** Are there markers that help to identify a potential relapse?

**Dr. Yeung:** There are no known clinical markers to identify a relapse. A gadolinium-enhancing lesion on magnetic resonance imaging (MRI) scanning may indicate active disease, but does not necessarily have a clinical neurological correlate. There is no evidence that the long-term clinical outcome of MS is influenced by precipitating factors of stress and trauma.

There is no evidence that the long-term clinical outcome of MS is influenced by precipitating factors of stress and trauma.

**MS Exchange:** Do patients measure relapse differently than clinicians?

**Dr. Yeung:** There are true relapses, pseudo-relapses (or pseudo-exacerbations), and fluctuations of symptoms. An educated patient can distinguish between these. True relapses are new, or worsening of previous, neurological symptoms as defined above. Pseudo-relapses are those that are accompanied by a metabolic change (e.g., infection, medication). Fluctuations are worsening of symptoms that can occur on an hourly or daily basis, and often are precipitated by fatigue and overactivity.

Relapses may also be defined as “functionally impairing” or “not functionally impairing.” This may help determine if treatment with corticosteroids is necessary. Clinicians also tend to define severity of a relapse depending upon the functional system that is involved. Brain stem, vision, spinal cord, motor, and coordination symptoms are considered more serious than sensory symptoms.
**MS Exchange:** Are treatment failures and relapse the same thing to a patient? To a clinician?

**Dr. Yeung:** This is a difficult question, as the definition of “treatment failure” has not been agreed upon. The current immunomodulatory therapies are not a cure for MS, but have been shown in clinical studies to decrease the number of relapses by ~30–50%. This means most patients will still have relapses, as these medications do not stop all relapses. Patients (and clinicians) must have realistic expectations about these drugs.

I think that most clinicians would say a patient has failed therapy if their relapse frequency does not change from baseline while on treatment, or has not reached the minimal goal of 30% reduction. Others will use MRI imaging to help with that decision. It’s likely that both patients and clinicians would see progression of symptoms and continued accumulation of disability as unacceptable. Unfortunately, this may just be the disease course in that particular patient meeting the limitations of current drug therapies.

**MS Exchange:** Does patient history accurately reflect the number of relapse events (meaning, are some relapses actually buried in terminology that fails to define them)? Can you provide a list of ways a relapse might be defined on a patient record?

**Dr. Yeung:** People’s memories are not perfect, so unless they document every little event, they will often forget them. Therefore, more frequent follow-up will confirm more relapses, although this is often clinically not feasible. Also, not every symptom is related to MS—just because a patient has a chronic neurological condition does not mean that he or she won’t get other neurological diseases (such as carpal tunnel syndrome, sciatica, or migraines) that are not related to MS, as well as other diseases such as hypertension, diabetes, or thyroid disease. One of the caveats for MS is that there is no better explanation for the symptoms.

Relapses can take the form of almost anything that can affect the central nervous system (brain and spinal cord) and can include optic neuritis, internuclear ophthalmoplegia, gaze palsies, trigeminal neuralgia, incomplete transverse myelitis, hemisensory loss, paraparesis, bladder and bowel symptoms, and gait problems.

**MS Exchange:** Are there levels or increments of relapse? How would these be defined?

**Dr. Yeung:** Sensory symptoms are considered less severe than motor, brain stem, visual, and coordination problems. The prognosis seems to be better if the symptoms start to improve spontaneously within a couple of weeks of onset. The level of functional disability may also be helpful in defining the severity of the relapse.

**MS Exchange:** What are the implications of relapse?

**Dr. Yeung:** A clinical relapse is the outward manifestation of MS disease activity. More frequent relapses, and therefore more active disease, may indicate a higher risk of accumulating disability. More damage is likely occurring, and even though there may be complete recovery from a relapse, the repair process is not perfect. Therefore, it is important for patients to start treatment early (although the treatments are imperfect) and to adhere to the treatments.
The Psychological Impact of Relapse

Relapse is one of the hallmarks of multiple sclerosis (MS), and one of the most challenging aspects of the disease for patients to manage. After the first event, patients have some idea of the distress caused by the disease, and yet there is no predictable pattern for the course of their illness or where they will be in just a few years. We talked with Cathy Lee Benbow, BSW, MSW, RSW, coordinator of the MS Clinic at the London Health Sciences Center in London, Ontario, for a social worker’s perspective on MS relapse.

Nurses and allied health care professionals provide critical support to the well-being of patients with chronic diseases, and particularly in MS where every patient case is different. The psychological challenge to MS is the constant suspense: *Will this attack end? When? How long before I have another attack? How severe will it be?* The rhythm of life is broken, and everything is thrown into chaos. The uncertainty of the future with MS is in many ways as debilitating to patients as the disease itself, and the MS care professional team can offer guidance to navigating each new challenge.

“When we diagnose MS, we give patients uncertainty as a partner in life,” says Ms. Benbow. “We try to counsel them at the outset, to help them to develop coping strategies for dealing with that uncertainty.” Each patient case is unique. Ms. Benbow has seen patients go a number of years before another event occurs, while others experience multiple episodes within a very short period of time. They all wonder: *Will this be the day? Does that feeling in my hand mean a relapse?*

Preparing for Relapse

Preparing patients for the eventuality of relapse is a key function of the MS health care team. “It’s hard to prepare for that first relapse,” Ms. Benbow says. “When you’re diagnosed with a chronic illness like MS, you don’t have a script like you do with an acute illness, where you have a diagnosis, get treatment, and the disease is resolved. With MS, you have to develop your own script about how you’re going to live with the disease.” Each patient reacts differently to recurrences, depending upon their personal coping strategies for other stresses in life.

Common Reactions to Relapse

The most common reaction to the idea of life with MS is generally grief, according to Ms. Benbow, as patients try to deal with real or anticipated losses. Depending on their personal grief response, patients will react with any combination of anger, withdrawal, denial, or irritability. “I explore past grief responses to see how they will deal with life with MS,” she says. “Maladaptive coping responses are red flags. We are vigilant about watching for them and directing patients toward a more adaptive way of coping.”

Additionally, the reactions of partners and significant others, friends, and children are part of the response to an exacerbation, Ms. Benbow points out, adding that as patients experience loss and change, the whole network and family system will experience change as well.

Approaches Toward Managing Relapse

One of the first things Ms. Benbow does is look at what has worked at other times in patients’ lives—

(Continued on page 9)
The role of the multiple sclerosis (MS) nurse is one that has evolved to become pivotal to the coordination of each patient's care over the lifetime of his or her illness. The continued relationship with the patient and family members allows the MS nurse to become attuned to physical issues relating to the disease. In this way, the MS nurse is able to manage symptoms such as bowel and bladder dysfunction, pain, cognitive deficits, and depression, so that the physician doesn’t need to be involved in day-to-day patient care. As Aliza Ben-Zacharia, MSN, ANP, a nurse practitioner at the Corinna Goldsmith Dickinson Center for Multiple Sclerosis at the Mount Sinai Medical Center in New York, explains, “We can independently treat and follow up with patients where the physician used to, and we can refer patients for physical and occupational therapy as needed.”

At the same time, the scope of the MS nurse’s responsibilities has grown broader as well. “We even act as case managers. I sometimes talk to patients about diet and nutrition, vitamins, and mammograms. It may not always be related to MS,” says Ms. Ben-Zacharia. This expanded role means that nurses are critical to the long-term health of the patients they serve. “We are directly involved,” she adds.

The nurse is the key person in the center of the patient care circle who coordinates the treatment plan and manages pain and other symptoms. As Ms. Ben-Zacharia notes, many of the medications involved in MS care are self-injected, so nurses have the primary

(Continued on page 7)
Defining an MS Nurse: 
Linda Morgante, RN, MSN, MSCN

Linda Morgante first entered the world of MS and my life in 1986. During the next few years, she became a leading figure in MS circles through her work and through the person she was. Until her recent death, she was a vital part of the IOMSN and MS nursing worldwide. She touched the lives of thousands of physicians, nurses, and patients and their families during the past years. She inspired her students to reach for excellence in nursing. She inspired us all by who she was and what she stood for: HOPE.

There has never been and there will never be a woman like her. Her persona was her beautiful self, her soft voice, her sensitivity to others, her tenderness and skills as a nurse, her great dignity and intelligence. We all seek perfection, and Linda would be the first to say she was not perfect. But she was! No task was too hard for her; no challenge too great; no time was too late for her; she never said no. She walked through life as a role model, friend, wife, counselor, lecturer, writer, and teacher. To Joe Porcelli, her beloved husband, she was a caring and loving companion and lifetime partner. To her nurse friends and colleagues she was a friend, generous collaborator, and mentor. She embodied the self that all of us dream we can be.

So how can she no longer be with us? Shockingly, she passed away on Monday, March 26, 2007 after a brief, devastating illness. We are amazed that this woman of courage who inspired hope and spirituality is no longer walking among us. We are stunned at our loss; at the prospect of never hearing her voice; never working with her again; never laughing and joking about our challenges as MS nurses.

Linda inspired hope and caring in the world of MS. She left each of us in a better place when she touched our lives.

Joe, our love and sorrow for your loss know no bounds. Please know that we are here for you and will never forget Linda. She will live on through you and through her friends.

In her memory we must do something; we must establish a lasting memorial to her spirit of giving and life of hope. We must each get a HOPE Rock and leave it where patients and families can see it and touch it. But where is Linda? How painful this time is for all who knew her. How can we get through this? Linda would quietly say to me “Now June...”

We know and hope that she is watching us and coaching us in our lives and in our work. We thank God that we had her with us even ever so briefly. We must pledge to continue our work as physicians, MS nurses, as women and men who care, with a pledge to sustain HOPE throughout the rest of our lives.

Linda our dear friend, rest in peace. We will never forget you!

—June Halper, MSCN, ANP, FAAN

An Acrostic Poem for Linda

L
o
ve to all and so much patience
I
n not so many words but do's
O
o nonsense or any shortcuts
D
oing all with kindness & caring
A
gain and again and again
M
iss you already
O
n many days
R
emembering all our laughs
G
oing away but not so far
A
cademically speaking
N
ear our hearts
T
o a great teaching experience
E
njoy your future & keep in touch!

With Love—Aliza Ben-Zacharia
MAY 2007
MS EXCHANGE

IOMSN UPDATE

(Continued from page 5)

The course of MS varies by patient, as does the response to therapy, and the nurse is central to optimizing treatment. “It’s not only one system. All of the body’s systems are affected by MS,” Ms. Ben-Zacharia points out. “You need to address all the direct and indirect effects of the disease. It is important to have a professional involved in treatment who has the knowledge as well as a compassionate and caring approach.” As part of patient care, nurses are also involved in research protocols, helping to design and implement clinical trials that explore new medications and treatment options for MS patients.

Because MS nurses work with patients every day in MS centers, they can take the time to find individual solutions. Unfortunately, their contributions are often unheralded, and therefore, undervalued by hospital administrators or medical directors of clinics or MS centers.

“The vital issue is that we usually take care of all the needs of the patients and their families both related to, and unrelated to, their illness. As a result, our contribution to the bottom line is hidden because we’re too busy working to publicize what we do,” says Ms. Ben-Zacharia, who feels that self-promotion is something that has to be embedded in the basic education of nurses at the university level. “Nurses bring money into the institution,” she states. “It’s important to look at that and make sure one’s administrators know that.”

Ms. Ben-Zacharia provided some suggestions for promoting the MS nurse’s role at your institution or facility:

1) Talk to patients. If patients ask about how they can reward the nurses who care for them, suggest that they write a letter to the administration, because that is the best venue. Ask them to talk about the nurse’s role in their care and how the nurse has made a difference in their life.

2) Do presentations. Nurses get shy when administrators come around, but don’t be afraid to introduce yourself and what your role is. A nurse can be on the front line with patients and around the facility; they can talk as well as the physicians do.

(Continued on page 8)

Sponsor Teva Neuroscience is dedicated to the MS nurse community and has supported scholarships for nurses, educational programs such as monographs, CE programs, IOMSN dinners, the MS Exchange, and MS Nurse Counseling Points™.

Teva Neuroscience is also proud to say that all of its Shared Solutions Nurses are certified in MS Nursing.
3) Do your job and not the jobs of others. Nurses have many responsibilities and wear many hats. Because of our knowledge and expertise, we can cover everything, and sometimes we do too much. Nurses should focus on their role in patient care, and try to avoid doing many of the administrative tasks that could be done by others.

4) Write pamphlets or articles about your role as a nurse. Describe your role as a clinician and educator and show photos illustrating your care and your contact and communication with patients and their families.

5) Discuss your unique role as a clinician and educator while providing support to patients and their families—especially those with chronic diseases such as MS. Present lectures about your role in your center and in the community.

6) Conduct research trials measuring the impact of nurses on patient care in your center. Available research about the nurse’s role in improving patient care is limited; however, there is reasonable evidence to support nursing contributions in MS (Forbes et al. Journal of Advanced Nursing, 42(5), 442-462). Further research is essential to establishing the nature of the nurse’s role in MS care.

THE INTERNATIONAL REACH OF THE IOMSN

THE FRENCH (MS) CONNECTION

You have probably met them, the French Canadian MS nurses. They are easily recognizable by their funny accents. There are about 30 of them, mainly from the province of Quebec— they form the second largest working force in MS in Canada. And, like any other MS nurse, they have the same goals and preoccupations in mind, just in a different language: health promotion and assessment, education, quality of care, support, and compassion to improve the life of those affected with MS. The attainment of their expertise is made possible through regional French programs, which occur five to six times per year, such as RISSEP (Réseau des Infirmières Spécialisées en SEP), Journal Clubs, and through specialized international conferences such as ECTRIMS and CMSC—all excellent venues to learn and exchange information on different clinical practices. Many of them have written the MS Nursing Certification Exam in the past, and possibly 20 more will carry on that practice in the future.

They are very friendly and dynamic and they love to chat, so next time you meet one, say: “Salut!”

Guylaine Théorêt, RN, BScN
MS Coordinator
The Ottawa Hospital

A FEW WORDS TO OUR DUTCH COLLEAGUES!

In Nederland is het aantal MS verpleegkundigen in de afgelopen jaren enorm toegenomen. Waren er in 2000 nog maar 3 MS verpleegkundigen, momenteel loopt hun aantal tegen de 100!

Dit jaar zal ruim een derde (34 verpleegkundigen) het internationale examen afleggen om blijk te geven van hun kennis over MS. De volgende stap is een officiële affiliatie te worden van de IOMSN, de organisatie die wereldwijd alle MS verpleegkundigen bindt en in staat stelt hun kennis met elkaar te delen.

MS is en blijft een invaliderende aandoening die specifieke zorg vraagt van gespecialiseerde verpleegkundigen. Juist door kennis te delen kunnen we trachten mensen met MS, waar ter wereld je ook werkt als MS verpleegkundige, een hoogwaardige zorg te bieden.

De Nederlandse werkgroep MS verpleegkundigen is trots op de doorgemaakte ontwikkeling in de afgelopen jaren en hoopt de komende jaren op een vruchtbare samenwerking met haar collega’s over de hele wereld.

Marco Heerings, MA, ANP, MSCN, CCCN
President of the Dutch MS Nurses Organisation
Past President of the IOMSN
after divorce or loss of a loved one, and other events. Some patients turn to religion, hobbies, reading, or meditation. Ms. Benbow helps patients to reach back to those positive coping mechanisms. “Some patients just need to see somebody every couple of weeks and have a really good cry and feel supported,” she adds, emphasizing that the role of the MS health care professional is to help patients identify the strengths they already have.

Unfortunately, many patients at the time of diagnosis are not coping very well and cannot see effective solutions to daily problems. They will come to the early visits at the clinic expecting a shopping list of things to do that will make their lives manageable again. They want to be told what to do, and they’re not prepared for the hard work ahead of figuring out a new way to live.

At that point, it’s important to provide information and offer clarification to help open patients’ minds. They need to know where to access information as they need it, in order to understand and adhere to the treatment plan. Often patients don’t understand why they are taking a particular drug therapy, such as corticosteroids, when they don’t experience an immediate benefit in the way they feel. “If we can get them back into the clinic and address that question directly, patients are less likely to be angry and frustrated, and will adhere to the therapy,” says Ms. Benbow.

**Solution-Oriented Care**

The approach to case management at the London Health Sciences Center MS Clinic is to see patients on an annual basis for treatment monitoring and modification. Due to limited resources, additional appointments are reserved for confirmation of the diagnosis and for emergent care. Most patients experiencing an exacerbation are seen within that same week. In her role as social worker, Ms. Benbow generally provides at least 1 hour of initial counseling on the occasion of the diagnosis. After that, she can provide or she can refer patients as needed to local resources for weekly counseling focused on solution-oriented care around issues that are related to MS.

Patients are referred out for other needs, including unresolved issues such as sexual abuse, marriage problems, and psychiatric conditions. Reactive depression related to MS can be treated with medication (anxiolytics or antidepressants). Some patients are so overwhelmed during an exacerbation they don’t have the resources to cope, and they are the ones who most benefit from medication, after which counseling can be more effective. “They need that chemical change before they can even grasp the possibilities,” says Ms. Benbow.

---

Some patients can still work, but they may need to find ways to address job modifications with their employers.

**Life-Management Tools**

Ms. Benbow counsels her patients to think about ways to facilitate having a functional life with MS. For patients with severe physical limitations, she raises the idea of bringing in a home support worker who can help patients get out of the house, or just out of bed every morning. Some patients can still work, but they may need to find ways to address job modifications with their employers. She suggests they see mental pictures of themselves coping, and then discusses ways to overcome the barriers to making that happen.

Counseling for family members has one simple message, “you’ve got to understand that it’s not about you, it’s about MS.” When patients are irritable, depressed, or even angry, family and friends need to recognize it is the disease talking and not their loved one’s personal feelings about them.

People often forget they have a lot of support, including nurses who can get information for them, says Ms. Benbow. She suggests that it is an important function of the MS nurse to help patients understand that they are partners in the management of their MS. At the MS Clinic at the London Health Sciences Center, the patient’s role in deciding on treatment plans is highly valued, says Ms. Benbow. Her advice to patients? “When you come to this clinic, you’ll see internationally recognized experts in MS, but you are the expert in your MS and you need to come to this partnership in that way. Develop the relationship. Ask questions. Speak up. And make sure you understand the answers.”
n ongoing debate in MS treatment is whether oral or intravenous (IV) medications are superior in inducing remission. In the US, IV administration is the standard of care, while in Canada, oral therapies are most commonly used. Colleen Harris, MN, NP, MSCN, nurse practitioner at the University of Calgary Multiple Sclerosis Clinic, explains the protocol there. “Patients at the University of Calgary Multiple Sclerosis Clinic receive prednisone 1,250 mg on alternate days for a total of five doses. Patients are given twenty-five 50-mg tablets, and take the pills all at once on a full stomach or take half after breakfast and half after lunch,” she says.

Ms. Harris compared this with the treatment used in the US for acute relapses, which is usually 500 mg to 1,000 mg of methylprednisolone or Solu Medrol, in courses of three to five doses. Although studies showing equal side effects and bioequivalency for both the oral and IV routes have been done in Canada, the UK, and Denmark, centers in the US are not as comfortable with oral administration, Ms. Harris says, noting that this issue of oral vs. IV administration is being explored by healthcare groups such as the CMSC and the National MS Society.

The Pros and Cons of Oral vs. IV Medications

The primary disadvantages to IV administration are that it is invasive and more costly than oral medication. This route also requires administration by a professional at the infusion center or by an infusion nurse through home care. The major benefit is that it has more of an energy-boosting effect than that provided by oral delivery.

“The oral route is more cost-effective, with a base cost of oral drug running at approximately $30.00 as compared to $350.00 (Canadian) by the IV route,” explains Ms. Harris. The patient is able to time the dosing more conveniently and is not dependent on infusion center availability or a visiting nurse. A disadvantage to oral prednisone is that it is not available in high-dose tablets, requiring the patient to take many small pills.

Regardless of the route, steroid therapy has both short-term and long-term side effects. “For this reason, we tend to treat only relapses that significantly affect the individual’s quality of life, such as mobility, vision, and hand coordination,” says Ms. Harris. She further explains that most patients who go on high-dose pulse steroids are in the throes of an acute worsening of their illness. They tend to adhere to a short course of steroids quite well, as they are desperate to obtain relief. “The side effects for some can be challenging, but we can usually manage the insomnia and stomach upset with other medications so we can get them through their treatments,” she adds.

The difficulties of managing steroid therapy are an ongoing part of MS treatment, and one in which the nurse plays a crucial role by educating patients about the side-effect profile of the steroid. “We also advise them on the action of the medication and ensure that they take both calcium and vitamin D while on the medication, and even longer for some who are at risk for osteoporosis,” says Ms. Harris.

For the future of MS therapy, Ms. Harris predicts that reimbursement and coverage will be based on evidence of efficacy and cost. “It is a reality that is emerging in all health care systems around the world and I see this becoming even more of an issue as we face the future crisis in health care funding,” she states. “The oral route has been proven to be economical and effective, and may be the preferred route in the future everywhere.”
IOMSN REGIONAL MS NURSING UPDATES

IOMSN regional programs provide educational opportunities for MS nurses around the country.

The dates and locations of the meetings for each of the four regions are listed below:

**Region I:**
Albuquerque, New Mexico
Friday, August 31st, 2007

Venue: Mind Imaging Center
1101 Yale Blvd NE
Albuquerque, NM 87131

Nearby Hotel: Embassy Suites
1000 Woodward Place NE
Albuquerque, New Mexico
Tel: 505-245-7100

Chairperson: Elida Greinel, RN, BSN, MSCN, APN

**Region II:**
Billings, Montana
Saturday September 22nd, 2007

Venue: St. Vincent Healthcare Mansfield Center
1233 North 30th St.
Billings, Montana 59101

Nearby Hotel: Crown Plaza
27 N 27th St.
Billings, Montana
Tel: 406-252-7400

Chairperson: Pat Loge, MSN, FNPC, CNM, MSCN

**Region III:**
Birmingham, Alabama
Friday October 5, 2007

Venue: University of Alabama at Birmingham
Margaret Cameron Spain Auditorium
Spain Wallace Building – S100
620 19th Street South
Birmingham, Alabama 35233

Nearby Hotel: Courtyard by Marriott
1820 5th Ave South,
Birmingham, Alabama
Tel: 205-254-0004

Chairperson: Beverly Layton, BSN, CCRC, MSCN

**Region IV:**
Lebanon, New Hampshire
Saturday, October 6th 2007

Venue: Dartmouth-Hitchcock Medical Center
Fuller Board Room
One Medical Center Drive
Lebanon, New Hampshire 03756

Nearby Hotel: Residence Inn by Marriott
32 Centerra Parkway
Lebanon, New Hampshire
Tel: 603-643-4511

Chairperson: Brant J. Oliver, NP, MSN, CS, MSCN

DON’T FORGET TO REGISTER FOR EXAMINATION SITTINGS!

The application deadline for the August 2007 Multiple Sclerosis Certified Specialist (MSCS) exam sitting is July 1, 2007.

The application deadline for the November 2007 (US & UK) Multiple Sclerosis Certified Nurse (MSCN) exam is September 15, 2007.

The MSCS exams are held twice annually in February and August for specialists involved in MS care delivery, including physiotherapists, occupational therapists, psychologists, licensed practical nurses, licensed social workers, licensed dieticians, and physicians. Registered nurses are eligible for MSCS certification, although the Multiple Sclerosis Certified Nurse (MSCN) certificate is more specifically aimed at nurses.

Information and applications are available at www.ptcny.com.
AUGUST 25-28, 2007
11th Congress of the European Federation of Neurological Societies
Location: Brussels, Belgium
Contact: EFNS Head Office, Breite Gasse 4-8, 1070 Vienna, Austria
Tel: +43 1 889 05 03
Fax: +43 1 889 05 03 13
Email: headoffice@efns.org
Website: http://www.kenes.com/efns2007/

SEPTEMBER 6-9, 2007
First World Congress on Controversies in Neurology Congress
Location: Berlin, Germany
Contact: ComtecMed - Medical Congresses, PO Box 68, Tel-Aviv, 61000, Israel
Tel: +972-3-5666166 Fax: +972-3-5666177
Email: cony@comtecmed.com
Website: www.comtecmed.com/cony

OCTOBER 7-10, 2007
132nd Annual Meeting of the American Neurological Association
Location: Washington, DC
Contact: ANA, 5841 Cedar Lake Road, Suite 204, Minneapolis, MN 55416
Tel: (952) 545-6284 Fax: (952) 545-6073
Email: julieratzloff@llmsi.com
Website: www.aneuroa.org

OCTOBER 7-11, 2007
XII Pan American Congress of Neurology
Location: Santo Domingo, Dominican Republic
Contact: Natalie Shabi, 17 Rue de Cendrier
Tel: +41 22 908 0488
Email: calendar@kenes.com
Website: www.kenes.com/neuro-congresos/

OCTOBER 11-14, 2007
23rd Congress of the European Committee for Treatment and Research in Multiple Sclerosis/12th Conference of Rehabilitation in MS
Location: Prague, Czech Republic
Contact: AKM Congress Service, Clarastrasse 57, CH-4005, Basel Switzerland
Tel: +41 61 686 77 11 Fax: +41 61 686 77 88
Email: info@akm.ch
Website: www.akm.ch/ectrims2007

TELL US WHAT YOU THINK
We want to hear from you. We welcome your comments and suggestions, as well any information on meetings and studies.

Please write to the editors of MS Exchange at:

Delaware Media Group
66 S. Maple Avenue • Ridgewood, NJ 07450
Tel: 201-612-7676 • Fax: 201-612-8282