

The Role of the Multiple Sclerosis Nurse Practitioner

Colleen Harris, Shantha George, Chantal Kahovec,
Margaret Prociuk and Alexandra Roll, Lynn McEwan

Introduction

Multiple sclerosis (MS) is a chronic, neurological disease with diverse manifestations and responses to treatment (Leahy & Counihan, 2018). With an increasing number of disease-modifying therapies (DMTs) available for the treatment of MS, comes an increase in the complexity of treatment and care of MS patients (Leahy & Counihan, 2018). Nurse practitioners (NPs) provide a dynamic contribution to the care of MS patients and work collaboratively with neurologists, family physicians, registered nurses (RNs) and other members of the healthcare team. The MS NP is a growing profession in MS clinics, and more awareness and recognition of their valuable position in MS care is needed.

The goals of this whitepaper are to provide a clear understanding of the NP role in MS care, describe the complementary roles that NPs are able to fulfil within the comprehensive MS care teams as well as to offer an understanding of the value NPs bring to the field of MS and how this value can be maximized. This whitepaper is the collaboration of six MS NPs from clinics across Canada and will highlight the growing need for MS NPs in the current landscape of MS care.

The role of the MS NP

The NP profession was established in Canada during the 1960s and encompasses

experienced registered nurses who have completed a master's program and have an advanced scope of practice (Delvin, Braithwaite, & Camargo Plazas, 2018). The NP practice is grounded in the knowledge, values and theories of the nursing profession and incorporates knowledge and theories traditionally associated with physicians (Canadian Nurses Association, 2016).

Beginning in the 1980s, the Canadian government decreased medical school admission and active training positions, which led to a shortage in the number of physicians trained in certain specialties (Jiang, 2016). According to the 2012 Canadian Neurological Society Manpower Survey, wait-times for neurologists still exceeded international standards despite physicians working an average of 57 hours/week (Kirby, Weston, Barton, Buske, & Chauhan, 2016). Half of survey respondents reported a shortage of neurologists in their community and this situation is anticipated to worsen in the coming years as experienced neurologists retire (Kirby et al., 2016). Multiple sclerosis NPs can help fill the care gap in MS as a result of the neurologist shortage.

The MS NP has a dynamic role that supports patient care across the lifespan from the time of diagnosis, to planning for pregnancy, to dealing with the management of relapses and disability progression. The MS NP plays many roles, including administrator, educator,

collaborator, consultant, researcher, advocate and expert clinician (Costello & Halper, 2010). The MS NP is able to complement the care of the neurologist by managing neurological symptoms, monitoring ongoing blood work and liaising with other specialties and agencies when patients require additional assistance. Nurse practitioners offer support, help improve medication compliance and manage care in a cost-effective manner (Canadian Nurses Association, 2006). Multiple sclerosis NPs are often a bridge between neurology and family practice; helping to ensure patients have improved access in a timely manner.

Maximizing the value of NPs in an MS practice

Maximizing the value of NPs in the care of MS patients is imperative due to the complex nature of the disease. There are several areas in MS care that can be optimized by the NP including: acute relapse management, symptom management, yearly follow-up visits and ongoing management of the intricate needs of patients with MS.

Acute relapse management provided by the NP has been shown to be an effective measure to ensure patients are seen within the recommended guidelines of 14 days since acute relapse onset (Leahy & Counihan, 2018). The advanced knowledge of the NP allows a detailed history to be taken and pertinent assessments to be ordered, with the ability to interpret the results, develop and implement a treatment plan for acute relapses. MS management decision-making by NPs is comparable to that of neurologists for patients with potential relapses and/or treatment escalation (Leahy & Counihan, 2018).

Common symptoms of MS managed by NPs include: fatigue, spasticity, sphincteric dysfunction, pain, motor and sensory symptoms (Oliver, 2009). The expertise of the NP allows them to understand the

“

MS management decision-making by NPs is comparable to that of neurologists for patients with potential relapses and/or treatment escalation.

”

complex treatments that MS patients receive, including symptomatic management. The time they are able to spend with the patient during each visit allows not only for the formation of a management plan, but also for building a trusting relationship. Patient adherence to the proposed treatment and symptomatic management plan is fostered by the relationship NPs are able to establish. The NP is vital in collaborating with the interdisciplinary care team, the patient and caregivers, to improve quality of life for patients with MS. As key members of the healthcare team, NPs promote the continuity of care; meeting the complex care needs of patients, including patients who are at risk of repeat hospital admissions and those requiring longer visits to manage psychosocial needs such as increased anxiety.

Multiple sclerosis NPs also play key roles in annual DMT follow-up and ongoing patient education to ensure adherence to the prescribed treatment plans. Nurse practitioners have the ability to recognize treatment failure and to independently manage sequencing of medications. Nurse practitioners excel in their ability to provide patient education, enabling patients to understand their treatment and

Continued on page 22

The Role of the Multiple Sclerosis Nurse Practitioner

Continued from page 21



Nurse practitioners play a key role in mitigating unnecessary emergency department visits...



the possible side effects. Through consistent monitoring and follow-up, NPs successfully promote adherence.

Role of the NPs in improving health outcomes

With the growing number of patients with chronic illnesses, healthcare systems are increasingly challenged in providing necessary care and encouraging patients to participate in their care (Watts et al., 2009). Nurse practitioners are an important factor in overcoming these challenges (Watts et al., 2009). Engaging patients to participate in their care can empower patients and improve health outcomes. This involves a multidisciplinary approach, a trusting relationship with their healthcare provider and shared decision-making.

In addition to the high cost of DMTs and routine imaging, hospital admissions due to MS relapses contribute to the cost of managing MS (Abboud et al., 2017). Patients with MS

visit the emergency department for several reasons, including: relapses, pseudo-relapses (temporary worsening of preexisting deficits), other medical complications and treatment-related adverse effects (Abboud et al., 2017; Farber, Hannigan, Alcauskas, & Krieger, 2014) (Oynhausen et al., 2014). In our experience management of these patients can differ greatly across hospitals. Patients with MS can receive unnecessary admissions, tests and treatments (Abboud et al., 2017). Nurse practitioners play a key role in mitigating these unnecessary emergency department visits by providing patient education, encouraging communication with the MS care team and ensuring each patient has an optimal and tailored treatment strategy. Furthermore, NPs also assess the patients' support system to ensure their care plan is manageable and sustainable while identifying obstacles to patient participation (Roman & Menning, 2017).

As MS therapies evolve, there has been a growing need for competent and reliable MS nurses to provide proper counselling and management of patient expectations. We believe the MS NP can provide leadership and education to the MS nurse, preparing them for successful patient encounters to promote treatment adherence and improve patient outcomes (Burke, Dishon, McEwan, & Smrtka, 2011).

Nurse practitioners improve access to healthcare for a chronic disease population and increase patient satisfaction (Thotam & Buhse, 2020). Satisfied patients are more likely to comply with treatment regimens and participate in their own care (Fan, Burman, McDonnell, & Fihn, 2005). When compared to

physicians, NPs were found to have longer consultation times, providing more information and education to patients and families (Newhouse et al., 2011). Nurse practitioners demonstrated a higher likelihood of having more frequent follow-ups with the patient and providing a greater degree of education and teaching around health promotion (Newhouse et al., 2011). Empowering patients to take control of their disease, readying them with the necessary education and facilitating access to healthcare can improve their overall outcomes when managing MS.

Future directions

Nurse Practitioners directly involved in the care of MS patients have demonstrated positive outcomes. A cost effectiveness review revealed that NPs in ambulatory care roles have equivalent or better patient outcomes than comparators and are potentially cost-saving (Martin-Misener et al., 2015). There is no available research on MS NPs and their effect on decreasing emergency department visits for patients with MS. Future research displaying a reduction in emergency department visits by MS patients when seen by MS NPs would be instrumental in highlighting the ability of the expert MS NPs to manage symptoms and efficiently treat ongoing concerns of patients. These outcomes could be tracked through electronic health records or patient logs indicating when the patient had attended the emergency department due to an inability to contact the NP. Barriers to care could be identified and removed appropriately to facilitate workflows in clinics.

Potential research assessing the development and implementation of the NP role in clinics across Canada would assist for current clinics that do not have an NP to understand the potential value of an NP. Sangster-Gormley, Martin-Misener, Downe-Wamboldt, and Dicenso (2011) reviewed the importance of discussions leading up to the decision to

incorporate an NP into a practice as well as mentoring and role expectations. As MS has a very specific disease process and there are limited numbers of MS NPs in Canada, it would be prudent to consider a retrospective review assessing how MS NP positions were developed and the ways in which the role is currently being leveraged in Canada.

Conclusions

Multiple sclerosis is a complex and serious neurological condition. Multiple sclerosis NP's have the advanced education and skill set to meet the diverse needs of those living with MS throughout the disease trajectory. Unfortunately, patients are facing greater challenges in accessing MS specialist care due to fewer available MS neurologists and longer wait-times for consultations and follow-ups (Kirby et al., 2016). Nurse practitioners play a key role in improving access to care and enhancing patient outcomes.

It is important to recognize that NP's are autonomous in their role and that building relationships with the neurologist and healthcare team members is vital for the success of the MS NP (Côté, Freeman, Jean, & Denis, 2019). Rather than determining how an MS NP could "fit in," MS NPs should be provided the opportunity to define their own practice and outline the expertise they bring to the role (Delvin et al., 2018). Multiple sclerosis NP roles may also differ between MS clinics. Evaluation, defining meaningful outcome measures and collaborative research will be important for success in implementing and sustaining the MS NP role.

Acknowledgements

Editorial assistance was provided by MEDUCOM Health Inc. and supported by Sanofi-Genzyme.

The Role of the Multiple Sclerosis Nurse Practitioner

Continued from page 23

- Abboud, H., Mente, K., Seay, M., Kim, J., Ali, A., Bermel, R., & Willis, M. A. (2017). Triage Patients with Multiple Sclerosis in the Emergency Department: Room for Improvement. *Int J MS Care*, 19(6), 290-296. doi:10.7224/1537-2073.2016-069
- Burke, T., Dishon, S., McEwan, L., & Smrka, J. (2011). The evolving role of the multiple sclerosis nurse: an international perspective. *Int J MS Care*, 13(3), 105-112. doi:10.7224/1537-2073-13.3.105
- Canadian Nurses Association. (2006). Practice Framework for Nurse Practitioners in Canada. Retrieved from https://cna-aicc.ca/-/media/cna/page-content/pdf-en/04_practice-framework.pdf?la=en&hash=CEF6358183F07D3D3190E6AEE6FAE510E06460E0
- Canadian Nurses Association. (2016). The Nurse Practitioner - Position Statement. Retrieved from https://www.cna-aicc.ca/-/media/cna/page-content/pdf-en/the-nurse-practitioner-position-statement_2016.pdf?la=en
- Costello, K., & Halper, J. (2010). Advanced Practice Nursing in Multiple Sclerosis. 3rd. Retrieved from http://iomsn.org/wp-content/uploads/2016/07/APN_Monograph_3rdEd.pdf
- Côté, N., Freeman, A., Jean, E., & Denis, J.-L. (2019). New understanding of primary health care nurse practitioner role optimisation: the dynamic relationship between the context and work meaning. *BMC Health Services Research*, 19(1), 882. doi:10.1186/s12913-019-4731-8
- Delvin, M.-E., Braithwaite, S., & Camargo Plazas, P. (2018). Canadian nurse practitioner's quest for identity: A philosophical perspective. *International Journal of Nursing Sciences*, 5(2), 110-114. doi:<https://doi.org/10.1016/j.ijnss.2018.03.001>
- Fan, V. S., Burman, M., McDonnell, M. B., & Fihn, S. D. (2005). Continuity of care and other determinants of patient satisfaction with primary care. *J Gen Intern Med*, 20(3), 226-233. doi:10.1111/j.1525-1497.2005.40135.x
- Farber, R., Hannigan, C., Alcauskas, M., & Krieger, S. (2014). Emergency Department visits before the diagnosis of MS. *Multiple Sclerosis and Related Disorders*, 3(3), 350-354. doi:<https://doi.org/10.1016/j.msard.2013.11.004>
- Jiang, S. (2016). Physician Shortage Problem in Canada from 1980 to 2015. *Journal of General Practice*, 4(6).
- Kirby, S., Weston, L. E., Barton, J. J., Buske, L., & Chauhan, T. S. (2016). Report of the Canadian Neurological Society Manpower Survey 2012. *Can J Neurol Sci*, 43(2), 227-237. doi:10.1017/cjn.2015.316
- Leahy, T., & Counihan, T. (2018). Physician and advanced nurse practitioner decision-making in the management of multiple sclerosis. *British Journal of Neuroscience Nursing*, 14, 240-248. doi:10.12968/bjnn.2018.14.5.240
- Martin-Misener, R., Harbman, P., Donald, F., Reid, K., Kilpatrick, K., Carter, N., . . . DiCenso, A. (2015). Cost-effectiveness of nurse practitioners in primary and specialised ambulatory care: systematic review. *BMJ Open*, 5(6), e007167. doi:10.1136/bmjopen-2014-007167
- Newhouse, R. P., Stanik-Hutt, J., White, K. M., Johantgen, M., Bass, E. B., Zangaro, G., . . . Weiner, J. P. (2011). Advanced practice nurse outcomes 1990-2008: a systematic review. *Nurs Econ*, 29(5), 230-250; quiz 251.
- Oliver, B. J. (2009). Primary care management of fatigue and relapses in RRMS. *The Nurse Practitioner*, 34(9), 10-14. doi:10.1097/01.NPR.0000360141.20313.d0
- Oynhausen, S., Alcauskas, M., Hannigan, C., Bencosme, Y., Müller, M., Lublin, F., & Krieger, S. (2014). Emergency Medical Care of Multiple Sclerosis Patients: Primary Data from the Mount Sinai Resource Utilization in Multiple Sclerosis Project. *Journal of clinical neurology (Seoul, Korea)*, 10, 216-221. doi:10.3988/jcn.2014.10.3.216
- Roman, C., & Menning, K. (2017). Treatment and disease management of multiple sclerosis patients: A review for nurse practitioners. *Journal of the American Association of Nurse Practitioners*, 29(10), 629-638. doi:10.1002/2327-6924.12514
- Sangster-Gormley, E., Martin-Misener, R., Downe-Wamboldt, B., & Dicenso, A. (2011). Factors affecting nurse practitioner role implementation in Canadian practice settings: an integrative review. *J Adv Nurs*, 67(6), 1178-1190. doi:10.1111/j.1365-2648.2010.05571.x
- Thotam, S. M., & Buhse, M. (2020). Patient Satisfaction with Physicians and Nurse Practitioners in Multiple Sclerosis Centers. *Int J MS Care*, 22(3), 129-135. doi:10.7224/1537-2073.2018-042
- Watts, S. A., Gee, J., O'Day, M. E., Schaub, K., Lawrence, R., Aron, D., & Kirsh, S. (2009). Nurse practitioner-led multidisciplinary teams to improve chronic illness care: the unique strengths of nurse practitioners applied to shared medical appointments/group visits. *J Am Acad Nurse Pract*, 21(3), 167-172. doi:10.1111/j.1745-7599.2008.00379.x