The Emerging Role of Pharmacists in the Multidisciplinary Care of Patients with Multiple Sclerosis

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To the Editor

Multiple sclerosis (MS) is a complex disease state requiring delivery of patient-centered care by a high-functioning multidisciplinary team. The currently accepted case management model for patients with MS, formally introduced in the 1980s, has not been updated to represent emerging complexities in MS care. Specifically, the introduction of interferon-based therapies as well as glatiramer acetate in the early 1990s completely changed the way that these patients were managed. During the past decade, the introductions of various oral, intravenous, and injectable medications to the market have provided additional choices for MS treatment. Additionally, the options available to treat the symptoms of MS have expanded substantially. These advancements have drastically increased the amount of time that members of the multidisciplinary team must commit to medication management. As a result, the pharmacist is becoming a much more integral member of the interdisciplinary team that cares for patients with MS.

A specialty medication is defined as any medication that is used to treat a complex, chronic, or rare condition; has an annual cost exceeding $10,000; is available only through restricted, exclusive, or limited distribution networks; requires special storage, handling, or administration; and requires ongoing monitoring for safety or efficacy.[1] There are a variety of specialty medications used for patients with MS, including the disease-modifying therapies (DMTs) glatiramer acetate (Copaxone [Teva Pharmaceutical Industries Ltd, Petah Tikva, Israel] and Glatopa [Sandoz Inc, Princeton, NJ]), interferon beta-1a (Avonex [Biogen Idec Inc, Cambridge, MA] and Rebif [EMD Serono Inc, Rockland, MA]), interferon beta-1b (Betaseron [Bayer HealthCare Pharmaceuticals, Montville, NJ] and Extavia [Novartis Pharmaceuticals Corp, East Hanover, NJ]), peginterferon beta-1a (Plegridy [Biogen Idec Inc]), and fingolimod (Gilenya [Novartis Pharmaceuticals Corp, East Hanover, NJ]). However, it is a common misconception that only the DMTs are specialty medications that require a high level of care. Many symptomatic treatments, such as modafinil (Provigil [Teva Pharmaceutical Industries Ltd]) and dalfampridine (Ampyra [Acorda Therapeutics Inc, Ardsley, NY]) are also specialty medications and are associated with a great deal of complexity in terms of insurance issues and patient monitoring.

Simply considering the use of certain medications for patients with MS requires a great deal of knowledge and care. Providers must assess for potential drug interactions before initiating a new medication, despite the fact that most of the patient's medications may have been prescribed by outside providers. Obtaining an accurate and complete medication history can sometimes take a substantial amount of time, but it is absolutely necessary to prevent dangerous and costly drug-drug interactions. Physicians, physician assistants, and nursing professionals have historically been the ones to perform these tasks amidst all of their other patient-care duties.

Prescribers must also consider how DMTs and symptomatic treatments could affect a patient's other comorbid conditions. For example, interferon-based therapy should be avoided in patients with a history of depression,[2-6] and fingolimod (Gilenya) should be used with great caution in patients with a history of cardiac complications.[7] Many medications also require special laboratory and clinical monitoring before the provider can prescribe them. Although prescribers and nursing professionals are more than capable of performing these tasks, it is unreasonable to expect them to be the medication experts.

After a new medication is prescribed, patients often require authorizations for insurance approval (and often subsequent appeals to insurance companies) and medication administration training and counseling. Therefore, it can often be weeks before a patient can actually start taking a new medication. Once the patient is able to initiate therapy, close follow-up to assess for adverse drug reactions and adherence is required. Furthermore, regular laboratory monitoring is necessary for many medications. For example, it is recommended that patients taking dimethyl fumarate (Tecfidera [Biogen Idec])

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DOI: 10.7224/1537-2073.2015-079

have their lymphocyte counts measured at least every 6 months,[8] and many MS centers prefer to check these values more frequently.

Overall, the amount of time that providers have to spend simply managing medications for patients with MS is now quite substantial. Again, it is unreasonable to expect nursing professionals, as well as the other members of the multidisciplinary team, to both serve as medication experts and perform their regular patient-care duties. Without a medication expert, there will be increased inefficiencies, delays in treatment, decreased adherence to medications, and worse clinical outcomes for the patients. For these reasons, the pharmacist should be considered a necessary member of the MS multidisciplinary team.

There are numerous ways that pharmacists can optimize the care that patients receive. One of their primary roles is to perform a comprehensive medication review for all patients. The focus of this review should be to identify what treatments the patient has tried and failed, assess potential barriers to adherence, and identify potential drug interactions or contraindications to certain MS treatments. This simple process allows all the other members of the multidisciplinary team to develop their treatment plans in a much safer and patient-oriented manner.

After the decision is made to initiate a new DMT, the pharmacist can work closely with the other members of the multidisciplinary team and the patient to thoroughly explain the medication to the patient and answer any questions that he or she might have regarding the new therapy. For self-administered injectables, patients often have fear or anxiety about proper administration.[9] Pharmacists are uniquely trained to teach patients proper administration techniques, discuss potential adverse effects, and answer medication-related questions. At our MS center, this face-to-face interaction with patients often includes the pharmacist, the neurologist, and the MS nurse.

Perhaps the most important role that pharmacists can play for patients is to serve as a patient advocate. Hartung et al.[10] recently outlined the soaring cost of MS drugs in the United States and the trajectory of the drug prices in the future. Their study showed that cumulative annual drug prices increased by 21% to 36% between 2003 and 2013. It also states, "Without accounting for any potential manufacturer rebates, there are currently no MS DMTs with an annual cost less than $50,000 per year."[10(p2186)] Most patients can have most of these costs covered, but it can take up substantial amounts of time and energy to go through the necessary steps to have a specialty medication approved through the patient's insurance or to receive further assistance to cover the cost. Furthermore, this process can be confusing, and patients should not have to navigate it alone. By including pharmacists and pharmacy support staff as a part of the MS center, they can spend the necessary time and resources advocating for patients to ensure that they receive the appropriate medications in a timely manner.

Pharmacists are also uniquely positioned to support other members of the team in the area of ongoing patient management. Nursing professionals are often required to monitor a significant number of patients on an ongoing basis by assessing adherence to their medications, coordinating laboratory monitoring, and checking in with patients regularly to ensure that they are not having any adverse reactions to their medications. Again, this can take a significant amount of time, and nursing professionals cannot continue to be expected to assume all of these responsibilities while concurrently performing their regular patient-care activities. At our MS center, the nursing professionals and pharmacists work very closely to ensure that all of these tasks are completed on a regular basis. This integrated care model including the pharmacist has been well described previously in the literature. Specifically, Hanson et al.[11] outline the role of the clinical pharmacist in their MS center and describe how pharmacist interventions helped them achieve adherence rates to DMTs of greater than 90%.

The addition of a pharmacist to the multidisciplinary team can be of great value to MS centers by providing support to the other professionals in a synergistic manner that allows them to elevate patient care to the highest possible level. The added responsibilities accompanying the advanced medication therapies used in patients with MS require a medication expert. Therefore, to provide the level of care that is expected at MS centers, the addition of a pharmacist is a necessity. □

Financial Disclosures: The authors have no conflicts of interest to disclose.

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