

## DMT Adherence While Pregnant Is Tied to Lower Medical Costs

Women diagnosed with multiple sclerosis (MS) and being treated with disease-modifying therapies (DMTs) who become pregnant often discontinue those agents, as none are approved for use during pregnancy. But a recent study by AllianceRx Walgreens Prime, in conjunction with parent company Walgreens, demonstrates that when these women remain adherent to DMTs, this may reduce their nonmaternity inpatient and outpatient costs.

The findings were presented at the virtual Americas Committee for Treatment and Research in Multiple Sclerosis Forum 2021, which was held at the end of February.

### MS Is More Common in Women Than Men

Almost 1 million people in the U.S. are living with MS, according to the National MS Society, with most of them receiving a diagnosis between the ages of 20 and 50. The condition is three times more common in women than it is in men. Among people with MS, pregnant women “make up a significant patient population,” says Kathleen Love, RN, clinical program manager at AllianceRx Walgreens Prime and research co-author. “When it comes to pregnancy or thinking of becoming pregnant, a key discussion on the risks and benefits of DMT therapy must take place between the patient and provider.”

Researchers conducted a retrospective study of commercially insured patients from the MarketScan Commercial Claims and Encounters database for three years, from 2014 to 2017. They identified females diagnosed with MS and, over two consecutive years, analyzed their pattern of treatment from outpatient and inpatient visits and their DMT use. Patients had to have had at least two DMT fills; those with indications of death or a hospice stay were excluded.

“Patients selected were those who had a consecutive two-year follow-up period from first observed DMT,” explains Francis Staskon, Ph.D., senior analyst of health analytics, research and reporting at Walgreens and lead author. “Pregnancies that were present during that follow-up period were a focus, with an indication of it in the first or second year of follow-up. The year of pregnancy became a variable in this descriptive correlational study. More pregnancies were documented in the first year, given the data was censored on the medical records at the later months of the second year.”

Determining DMT adherence was based on Pharmacy Quality Alliance criteria: more than 18 years old, continuous enrollment, 365-day follow-up from the index date for proportion of days covered (PDC) and DMTs that were not infused. Those agents are interferon beta 1a, interferon beta 1b, peginterferon beta-1a, glatiramer acetate, fingolimod, teriflunomide and dimethyl fumarate.

### Patients Were Divided Into Three Groups

The patients were split into three groups: (1) consistently adherent, defined as at least 80% PDC, in both years; (2) adherent in only one year; or (3) adherent in neither year. Those who discontinued their DMT were included with the less adherent groups. For the 603 patients studied, 9.2% were adherent both years, 39.9% were adherent in only one year, and 53.9% were not adherent in both years.

Most of the women who used maternity services — 82.7% — were in the first-year follow-up period. There were 500 first-year pregnancies, and among those women, 79% discontinued DMTs in the second year. This, Staskon tells AIS Health, “would be an expected result given medical guidelines do not stipulate continued DMT adherence for pregnancies.”

Forty-eight females had comorbidities, with chronic pulmonary disease the most common. Others included diabetes, paraplegia, hemiplegia and cerebrovascular disease. The comorbidities are noteworthy, says Love, because

“the life-long successful management of MS entails a balancing act between optimal DMT therapeutic outcomes and side effect management, as well as ongoing MS symptom management, pregnancy and any comorbidities that require ongoing treatment and monitoring. This adds more complexity and consideration to optimize outcomes.”

Almost half of the patients — 46.4% — used glatiramer acetate at the index date, followed by 12.1% on dimethyl fumarate. Among the 53 women who did not remain on their index DMT, glatiramer acetate was the top agent switched to, with 37.7% doing so. Researchers found that “the adherent group percentage per maintained index DMT is as high as 11.2% for glatiramer and as low as 0% for interferon beta 1b.”

### **DMT Costs Were Higher in Adherent Group**

DMT costs within the adherent group were much higher than in the other two groups: a mean of \$142,372 for the adherent group, compared with \$97,671 in the mixed adherence group and \$54,014 in the nonadherent group. However, when nonmaternity medical costs were analyzed, the adherent group’s mean was \$2,314, which was “significantly lower” than those of the other two groups, the study noted. The mixed adherence group’s mean medical cost was \$5,265, and the nonadherent group’s was \$6,697.

“MS patients in maternity typically reduce their DMT medication adherence, but a significant number continue, and even demonstrate good adherence levels,” concluded the study.

“The risks and benefits of continuing therapy during pregnancy require careful discussion, taking into account the mother’s level of disease activity, choice of DMT, personal preferences and the patient’s and doctor’s risk tolerance to both the fetus and mother,” Love tells AIS Health.

“The current standard of care is to avoid the use of DMTs during pregnancy and breastfeeding; however, there is growing evidence that some patients and physicians are deciding to continue therapy on a case-by-case situation,” she explains. “If a continuation of therapy is being considered, much of the discussion is around any potential risks to the fetus while maintaining the mother’s disease management. Discussions on postponing resumption of treatment until after pregnancy and breastfeeding are also pivotal, particularly for women who had active disease in the year prior to conception and concern of further MS progression postpartum.”

“MS is so unpredictable and unique per individual,” says Love. “There are so many choices now for patients with MS, and a very key component in therapy along the continuum of their life is their discussion about their DMT with their prescriber.”

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*by Angela Maas*