## Improving Health Care Literacy Among Patients with MS through a Flipped Classroom Model

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**Background:** Providing a comprehensive approach to Brain Health in Multiple Sclerosis (MS) care is an unmet need. The Brain Health Center of the Rockies provides educational tools and exposure to health care providers aiming to empower patients through a Brain Health Program. Our program is designed to provide a multidisciplinary approach that is customized via participant interviews to meet the individual needs of our patients. In order to provide a more active learning method, we have selected a Flipped Classroom strategy in which learners encounter information before class, freeing class time for activities that involve higher order thinking. To our knowledge, the utilization of a Flipped Classroom approach has not been used in patient education to date.

**Objective:** This project will assess improvements in Health Care Literacy in individuals with MS who participated in the Flipped Classroom Brain Health Program.

**Methods:** 24 patients with MS participated in the program. Demographics include age, sex, race and disease duration. All participants completed sixteen pre-recorded online modules on topics including Disease Modifying Therapies, Fatigue, Cognition, Depression/Anxiety, Living with MS/Caregiver Support, Pregnancy and Family Planning, Social Security Disability and Employment, New Therapies, Exercise, PT, OT, Sleep, and Nutrition. At the completion of these modules patients had access to 6 live virtual 1-hour sessions. Each session had a balance between didactic, experiential learning and a Q&A portion.

**Results:** At baseline, and after the completion of the program all participants completed a brief Health Care Literacy in MS questionnaire. 71% of participants improved their understanding of MS in order to make educated decisions on their MS therapies, 67% felt more confident in their overall knowledge of MS, and 92% felt more familiar with the concept of Brain Reserve, Brain Health, and the difference between MS progression and deconditioning. Additionally, 100% of participants rated each session favorably and up to 90% of participants indicated that they felt more empowered to live with MS as a result of what they learned.

**Conclusions:** The flipped classroom model of the Brain Health Program proved to be an effective method to improve Health Care Literacy and empower patients living with MS.