(S132) PATIENT-PERCEIVED SEVERITY OF STRESS DECREASES BETWEEN BASELINE AND FIFTH-YEAR INTERVAL

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Background: A link between stress and multiple sclerosis (MS) has been widely accepted for decades, and modern views hold that stress is related to exacerbations and progression. However, research has been limited to existing studies based on small sample sizes. Objectives: To examine patient-perceived stress levels over a 5-year period by duration from symptom onset, disability, and disease types. Methods: The study design was a retrospective cohort study of 1250 patients with MS. Clinical, demographic, and patient reports using the LIFEware instrument, which measures patient-perceived disability and emotional states, were extracted from the New York State Multiple Sclerosis Consortium registry for patients aged 18 to 60, with complete data at baseline and fifth-year interval. Results: Of the patients, 75.1% were female and 94% white; the mean (SD) age at symptom onset was 31.5 (9.0) years, and the mean duration from symptom onset to registration was 11.5 (8.7) years. There was an overall reduction in stress levels from baseline to fifth-year interval for all subgroups. Stress levels did not significantly differ by disease type at registration, Expanded Disability Status Scale (EDSS) score, duration from symptom onset, sex, or age. The proportion of patients reporting moderate-to-high levels of stress at baseline was 42.9% of relapsing-remitting MS (RRMS) patients and 41.6% of patients with progressive disease types. The proportions decreased over the fifth-year interval to 35.3% of RRMS patients and 31.3% of RRMS patients with DMT use. There was a decrease in the progressive disease group, with 28.4% reporting high stress levels at the fifth-year interval. Conclusions: It appears that the proportion of MS specialty-care patients who perceive high levels of stress at baseline abates over a 5-year interval, with the greatest decrease for RRMS patients occurring with DMT use. Because this study includes only patients of MS-care specialists without comparison with patients of other provider types, we cannot rule out the potential effect of the care environment and likelihood of drug treatments related to stress reduction. Further study is warranted to understand how stress reduction is related to progressive disease types, as well as investigation of the effect of high or moderate chronic stress.

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