Understanding Prospective Memory in Multiple Sclerosis: How Are Objective and Subjective Measures Related and Who Experiences Problems

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Background

• Persons with multiple sclerosis (PwMS) can experience deficits in prospective memory (PM) or “remembering to remember,” which are associated with functional difficulties.
• However, little is known in this population about the relationship between objective and subjective measures of PM or who is more likely to experience PM impairments.

Objectives

1. Examine the association between objective and subjective measures of PM.
2. Explore which demographics and MS-related characteristics are related to objective and subjective PM performance.

Methods

Participants:
• PwMS (n = 112) from a larger study who completed a neuropsychological battery.

Measures:
• Demographics: Age, education, gender, race, and ethnicity
• MS-related characteristics: disease duration, MS type, and level of disability (Patient Determined Disease Steps; PDDS)24
• Objective PM: Memory for Intentions Test (MIST)5
• Raw total score used
• Subjective PM: Perceived Deficits Questionnaire PM subscale (PDQ-PM)
• Depressive Symptom Severity: Hospital Anxiety and Depression Scale (HADS-D)7

Statistical Analyses:
• Aim 1: Spearman’s correlation between the MIST and PDQ-PM, followed by a partial correlation controlling for HADS-D.
• Aim 2: Separate stepwise linear regressions for the MIST and PDQ-PM with the selected demographics and MS-related characteristics.

Results

• MIST Total Score and PDQ-PM were significantly, albeit weakly, associated with each other (r = -.24, p = .012).
• After controlling for the HADS-D, the relationship remained significant (r = -.21, p = .030).

Conclusions

• While the findings suggest that Black PwMS experience higher rates of PM issues, on both objective and subjective measures, further investigation is needed to determine the specific contributing factors.

References


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