Rate of Adherence to Neuropsychological Evaluation Recommendations

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Abstract

<u>Objectives:</u> To identify rates of adherence and reasons for non-adherence to recommendations made from neuropsychological testing among persons with Multiple Sclerosis (MS).

<u>Methods:</u> Patients with MS who underwent neuropsychological testing from 2015-2016 were contacted. 45 patients reported adherence rates to recommendations and gave 48 reasons for non-adherence. Retrospective chart review was performed to gather other neuropsychological test data.

<u>Results:</u> There was a 38.2% overall adherence rate. 11.1% of the sample completed all recommendations. 53.3% of patients completed some of the given recommendations. Adherence rates varied depending on recommendation type. 42% of the sample reported non-adherence due to wanting more information regarding the recommendation/wanting to speak with their neurologist. Additional reasons were identified.

<u>Conclusions:</u> Adherence rates to recommendations made from neuropsychological testing ranged from 6.5% to 80% depending on recommendation type. Reasons for non-adherence highlight areas which may benefit from targeted intervention.

Background

- As many as 65% of persons with MS experience cognitive dysfunction¹.
- Neuropsychological testing is often a key component in identifying and tracking cognitive impairment and progression. Neuropsychological testing typically evaluates how mood and physical symptoms (i.e., depression, fatigue) impact and influence cognitive abilities.
- Recommendations made to address cognitive impairments, mood disturbances and other influencing factors are vital to improving cognitive deficits, psychological functioning,² quality of life and maintenance of employment³.
- Adherence rates to neuropsychological test recommendations have not been evaluated in an MS population.
- This study aims to identify adherence rates and reasons for non-adherence to recommendations made from neuropsychological evaluation among persons with MS.

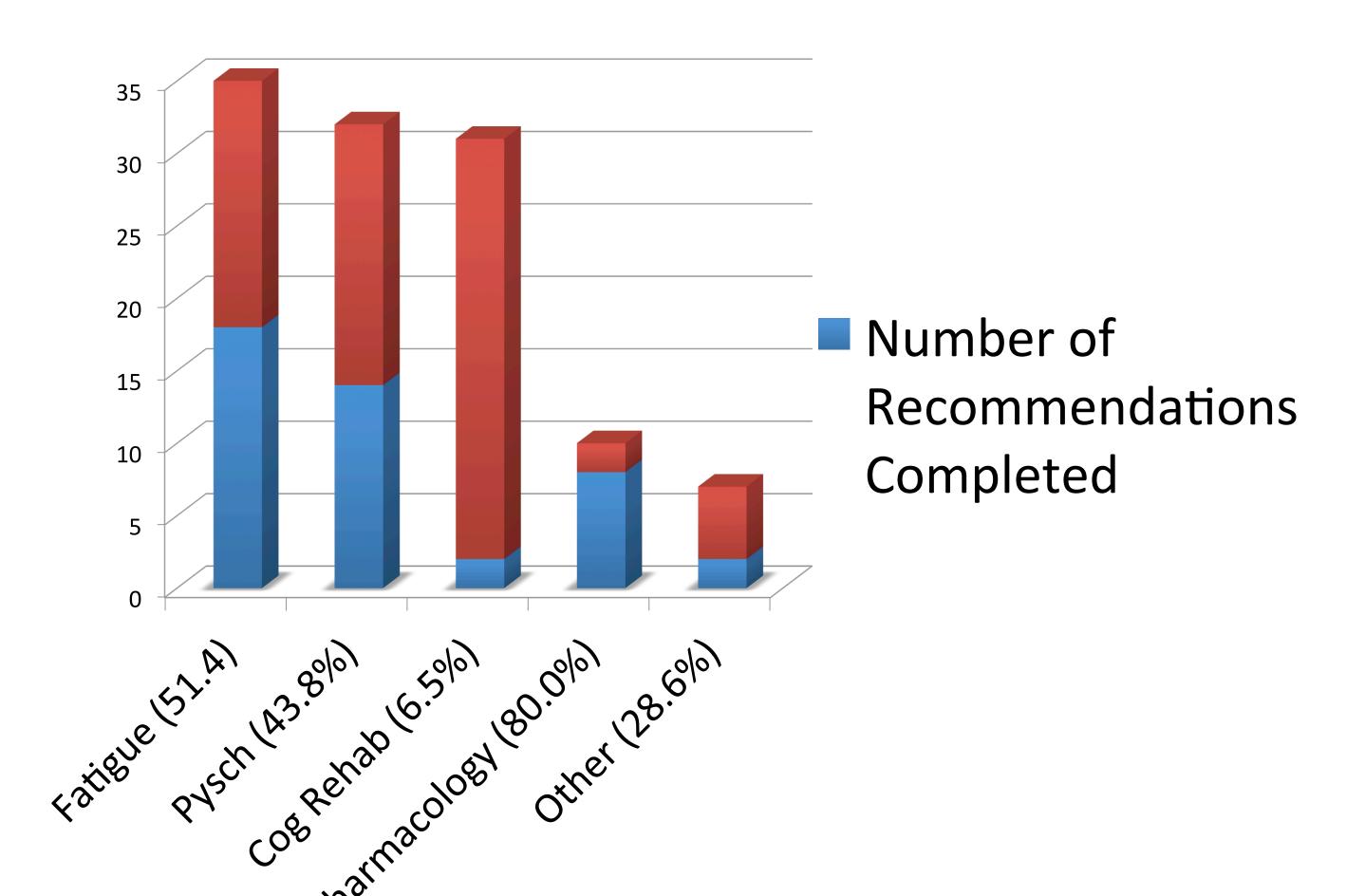
Methods

- 66 patients were seen for neuropsychological testing at the MS center in Holy Name Medical Center between 2015 to 2016.
- 11 patients were ineligible for this study; 55 patients were eligible and were contacted for a phone interview.
- 45 patients reported adherence rates and reasons for non-adherence to recommendations.

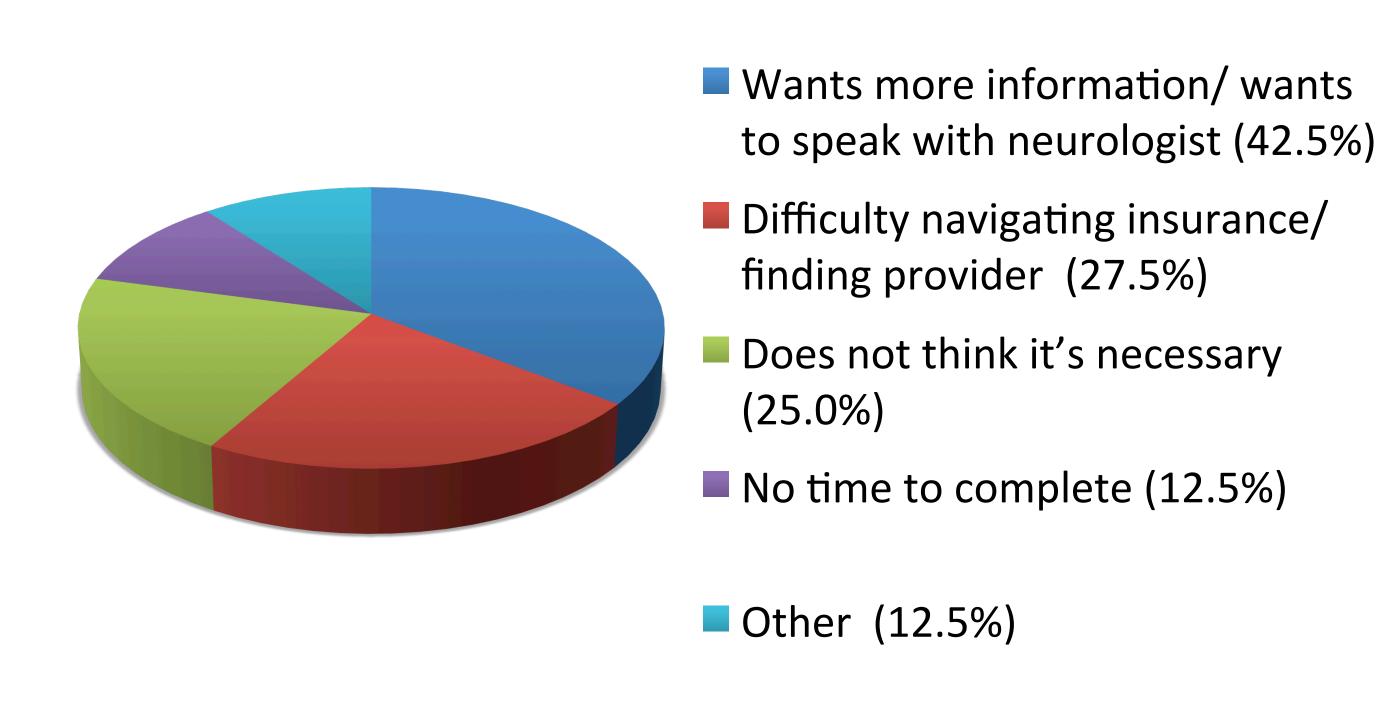
Variable N=45	Mean (SD) / N (%)
Age	43.4 (12.0)
Education (years)	15.1 (2.1)
Gender	
Female	34 (75.6%)
Male	11 (24.4%)
Employment Status	
Employed/Student	19 (42.2%)
Unemployed/Retired	26 (57.8%)
Adherence to Medication (N=42)	
Takes as prescribed	32 (76.2%)
Misses it once in a while+	10 (23.8%)

Results

Overall adherence rate to 115 recommendations and referrals was 38.2%. Of the 45 patients, 5 individuals completed all given recommendations (11.1%), 24 people completed some of their recommendations (53.3%) and 16 people completed no recommendations (35.6%).



Reasons for Non-Adherence



Conclusions

- Overall adherence rate to neuropsychological test recommendations is low
- Greatest adherence to recommendation made for psychopharmacological management (80%) and poorest adherence to cognitive rehabilitation recommendation (6.5%)
- Primary reasons for non-adherence included wanting more information (42.5%) and difficulty navigating insurance or finding a provider (27.5%), suggesting these are prime areas for targeted intervention to improve adherence.
- 77.5% of patients reported they might or definitely plan to complete recommendations if they are able to overcome reasons for non-adherence

References

- 1. Julian, L. J. (2011). Cognitive functioning in multiple sclerosis. *Neurologic clinics*, *29*(2), 507-525.
- 2. Moghadasi, A. N., Pourmand, S., Sharifian, M., Minagar, A., & Sahraian, M. A. (2016). Behavioral neurology of multiple sclerosis and autoimmune encephalopathies. *Neurologic clinics*, *34*(1), 17-31.
- 3. Zwibel, H. L., & Smrtka, J. (2011). Improving quality of life in multiple sclerosis: an unmet need. *The American journal of managed care, 17,* S139-45.