

Burden of Psychiatric Health in Elderly Myasthenia Gravis Patients: A Nationwide Medicare Perspective

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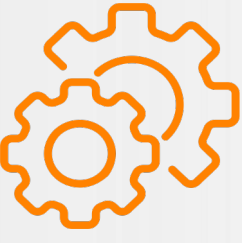
INTRODUCTION

- > Myasthenia gravis (MG) is a chronic autoimmune disease characterized by heterogeneous presentations of progressive muscle weakness with a typical age of onset between 20-40 years.¹
- > Currently, prevalence of MG in the US is estimated to be 60,000 patients.²
- > Treatment advancements have increased the lifespan of patients with MG, but disease burden in older populations is not well-characterized.
- > Fatigue is a highly prevalent symptom of MG that can have a profound effect on patients' lives.³



OBJECTIVES

- > The objective of this study was to characterize the burden of MG among Medicare beneficiaries age ≥65 years in terms of the prevalence and association between muscle weakness and psychiatric health.



METHODOLOGY

- > A retrospective analysis was conducted using Medicare Limited Data Set (LDS) Part A/B claims (Q1 2019-Q3 2020).

Patient Identification

- > Eligible MG patients were identified via ICD-10-CM* diagnosis codes, had ≥12 months of continuous coverage, and age ≥65 years
- > Only patients in the 5% random sample (carrier file) were included in the analyses
- > Patients were included if they had ≥1 inpatient OR ≥1 outpatient OR ≥ 2 carrier claims for MG*

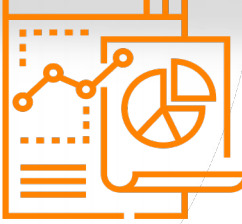
MG diagnosed* between January 2019 - September 2020
N = 3,148

≥12 months continuous enrollment**
N = 2,077

≥65 years of age
N = 1,861

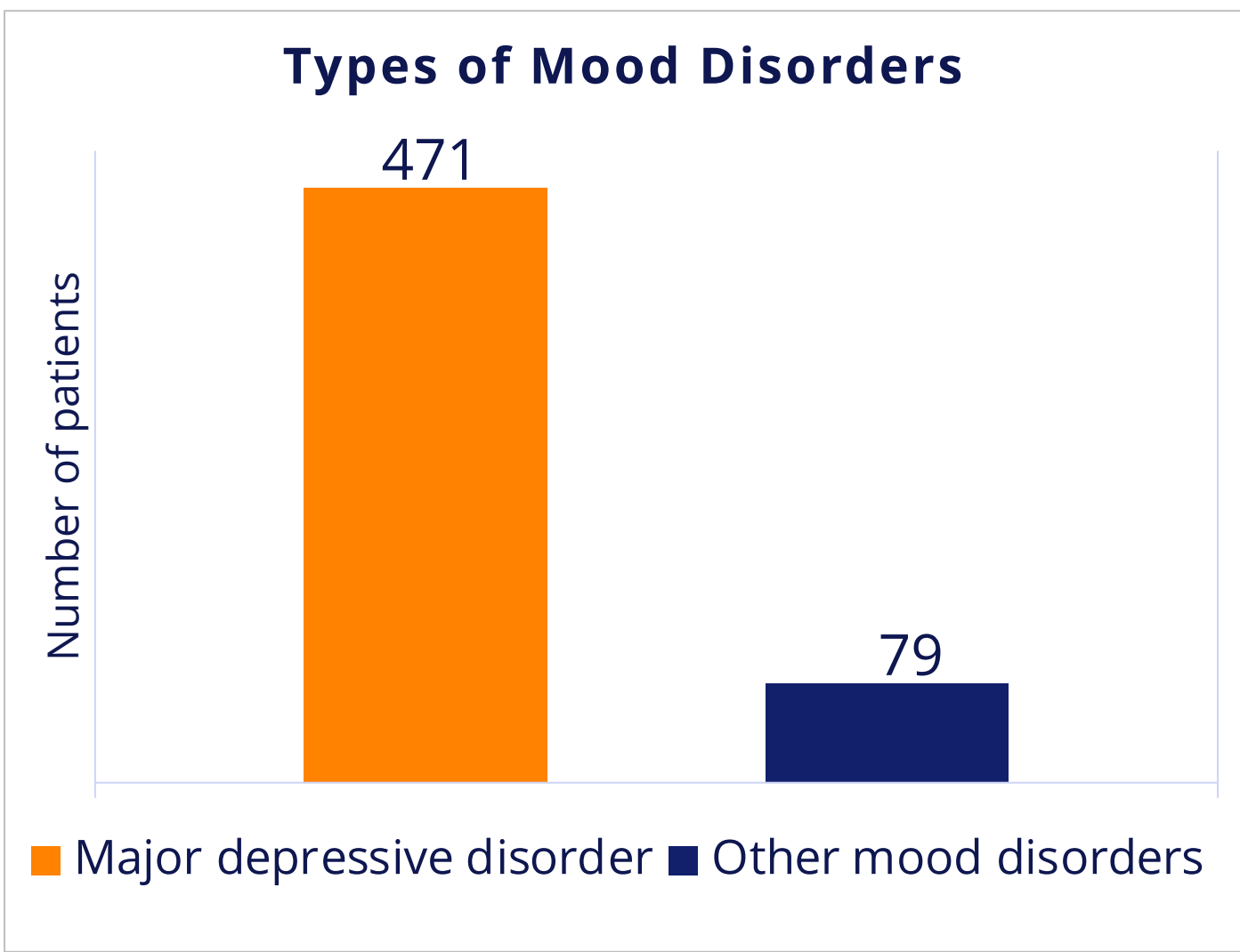
Psychiatric Health

- > Prevalence of comorbid conditions amongst eligible MG patients was similarly determined using ICD-10-CM*** diagnosis codes.
- > Likelihood of mood/major depression in the presence of severe or weak malaise/fatigue was assessed via Wald test using R Statistical Software.
- > Patients with more than the median number of fatigue claims were categorized as having frequent fatigue and those with less than the median number of fatigue claims as having in frequent fatigue.



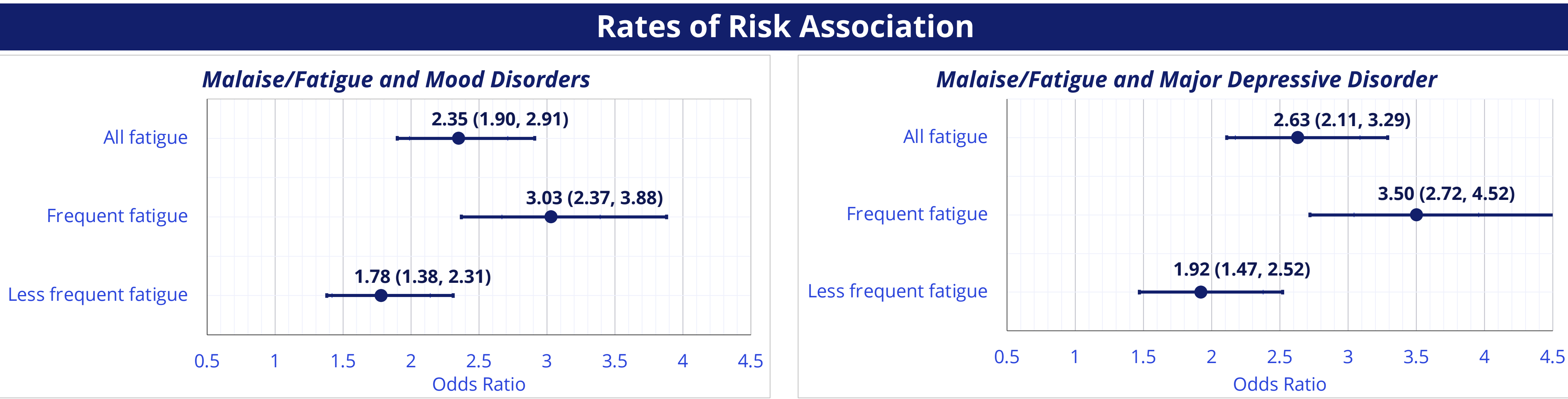
RESULTS

Patient Demographics	
Included MG Patients	
Sample N	1,861
% Female	44.7%
Age Distribution	N (%)
65-69	258 (13.9)
70-74	440 (23.6)
75-79	443 (23.8)
80-84	366 (19.7)
>84	354 (19.0)
Race/Ethnicity	N (%)
White	1,695 (91.1)
Black	84 (4.51)
Asian	13 (0.70)
Hispanic	14 (0.75)
Other	32 (1.72)
Unknown	23 (1.24)
Comorbid Conditions	N (%)
Mood disorders	508 (27.3)
Malaise/fatigue	966 (51.9)
Type of Mood Disorder	N (%)
MDD	471 (25.3)
Other mood disorders	79 (4.25)



Note: 49 patients had claims for both MDD and other mood disorders.

- > A total of 3,148 patients with MG claims were identified; 1,861 of those met the study eligibility criteria.
- > 44.7% of patients were female, and 91.1, 4.5, and 4.4% were White, Black, and Other race/ethnicity, respectively.
- > Prevalence of medically attended malaise/fatigue and mood/major disorders were 51.9% and 27.3%, respectively.
- > MG patients with malaise/fatigue have increased odds of having comorbid mood/major depression (OR 2.35, 95% CI: 1.90-2.91; p<0.0001) compared to those without malaise/fatigue.
- > The odds of having comorbid mood/major depression is higher in MG patients with frequent malaise/fatigue compared to MG patients with no malaise/fatigue (OR 3.03, 95% CI: 2.37-3.88; p<0.0001).
- > MG patients with frequent malaise/fatigue have increased odds of having major depressive disorder (OR 3.50, 95% CI: 2.72-4.52; p<0.0001) compared to those without malaise/fatigue.



CONCLUSION

- > Prevalence of medically attended malaise/fatigue and major depression was common in Medicare-aged MG patients.
- > Patients with malaise/fatigue had higher odds of presenting with comorbid mood/major depression compared to those without, demonstrating a significant association between physical mobility and psychiatric health.
- > Patients with frequent fatigue had a stronger likelihood to present with mood disorders compared to those with less frequent fatigue, corroborating the association between physical mobility and psychiatric health.
- > Adjusted longitudinal studies are needed to investigate a potential causal link. Despite this evidence gap, the burden of MG among older patients is substantial and represents an unmet need that does not appear to be addressed by current treatments.

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