

Assessing Comorbid Behavioral Health Conditions, Healthcare Resource Utilization, and Medication Use in Patients Seeking Mental Health Care within a Large, Representative Real-World Multiple Sclerosis Registry

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Background

- Multiple sclerosis (MS) has previously been associated with increased prevalence of behavioral health conditions compared to the general population, particularly depression and anxiety^{1,2}
- Behavioral health conditions are thought to be underdiagnosed and undertreated for patients with MS¹
- Additional research is needed to understand the true burden of behavioral health conditions for patients with MS

Objective

- To describe comorbid behavioral health conditions, healthcare resource utilization (HCRU), and medication use among patients with MS who were seeking mental health care (SMHC) in a real-world MS registry

Methods

- Data were derived from the OM1 MS Registry (OM1, Boston, MA), a multisource real-world registry with linked healthcare claims and electronic medical records data on patients with MS in the United States from 2013-2021
- The first observed MS diagnosis date was considered the index date
- All patients with MS SMHC were included
 - SMHC was defined as having any encounter with a behavioral health specialist, a behavioral health-related procedure code, or a record for a behavioral health-related medication on or after index
- Patient characteristics were assessed on or before index, while comorbidities, HCRU, and medication use included data post-index

Results

- Of 19,133 patients with MS, 15,384 patients (80.4%) were SMHC
- Patients with MS SMHC were on average 49.3 years old (standard deviation [SD]: 12.5), 78.4% female, 62.2% White, 3.9% Hispanic or Latino, 43.9% had commercial insurance, and 7.3% were current smokers (Table 1)
- Most patients with MS SMHC had a behavioral health comorbidity (71.3%) - with anxiety disorders (42.4%), depression (40.9%), and substance use disorders (37.3%) as the most frequent (Figure 1)
- Patients with MS SMHC most frequently saw psychiatrists (28.6%) and had non-substance use related psychotherapy (25.8%)
- Most patients with MS SMHC used behavioral medications (87.8%) - with the highest use for anti-anxiety medications (63.3%), antidepressants (58.1%), and mood stabilizers (46.9%) (Figure 2)

Conclusions

- Four out of five patients with MS were SMHC
- Anxiety and depression were the most common behavioral health comorbidities among patients with MS SMHC
- Patients with MS SMHC were frequently treated with behavioral health-related medications

Table 1. Characteristics of Patients with MS SMHC

Characteristic		Count (%) or Mean (SD) (N=15,384)
Age at Index		49.3 (12.5)
Sex	Female	12,062 (78.4%)
	Male	3,322 (21.6%)
Race	Asian	68 (0.4%)
	Black	1,528 (9.9%)
	White	9,563 (62.2%)
	Other	708 (4.6%)
	Unknown	3,517 (22.9%)
Ethnicity	Hispanic/Latino	595 (3.9%)
	Not Hispanic/Latino	9,783 (63.6%)
	Other	25 (0.2%)
	Unknown	4,981 (32.4%)
Insurance Type	Commercial	6,759 (43.9%)
	Medicaid	497 (3.2%)
	Medicare	2,174 (14.1%)
	Multiple	352 (2.3%)
	Other	124 (0.8%)
	Unknown	5,478 (35.6%)
Census Region	East North Central	1,631 (10.6%)
	East South Central	580 (3.8%)
	Middle Atlantic	2,409 (15.7%)
	Mountain	1,778 (11.6%)
	New England	471 (3.1%)
	Pacific	1,552 (10.1%)
	South Atlantic	3,572 (23.2%)
	West North Central	1,334 (8.7%)
	West South Central	1,809 (11.8%)
	Unknown	248 (1.6%)
Current Smoking Status	Yes	1,128 (7.3%)
	No/Unknown	14,256 (92.7%)
Baseline Duration (Months)		12.0 (17.7)
Follow-up Duration (Months)		75.6 (24.5)
Maximum EDSS*		4.6 (1.8)
Any DMT Use*		11,187 (72.7%)

*EDSS or DMT could occur pre- or post-index

Figure 1. Proportion of Patients with MS SMHC with Behavioral Health (BH) Comorbidities

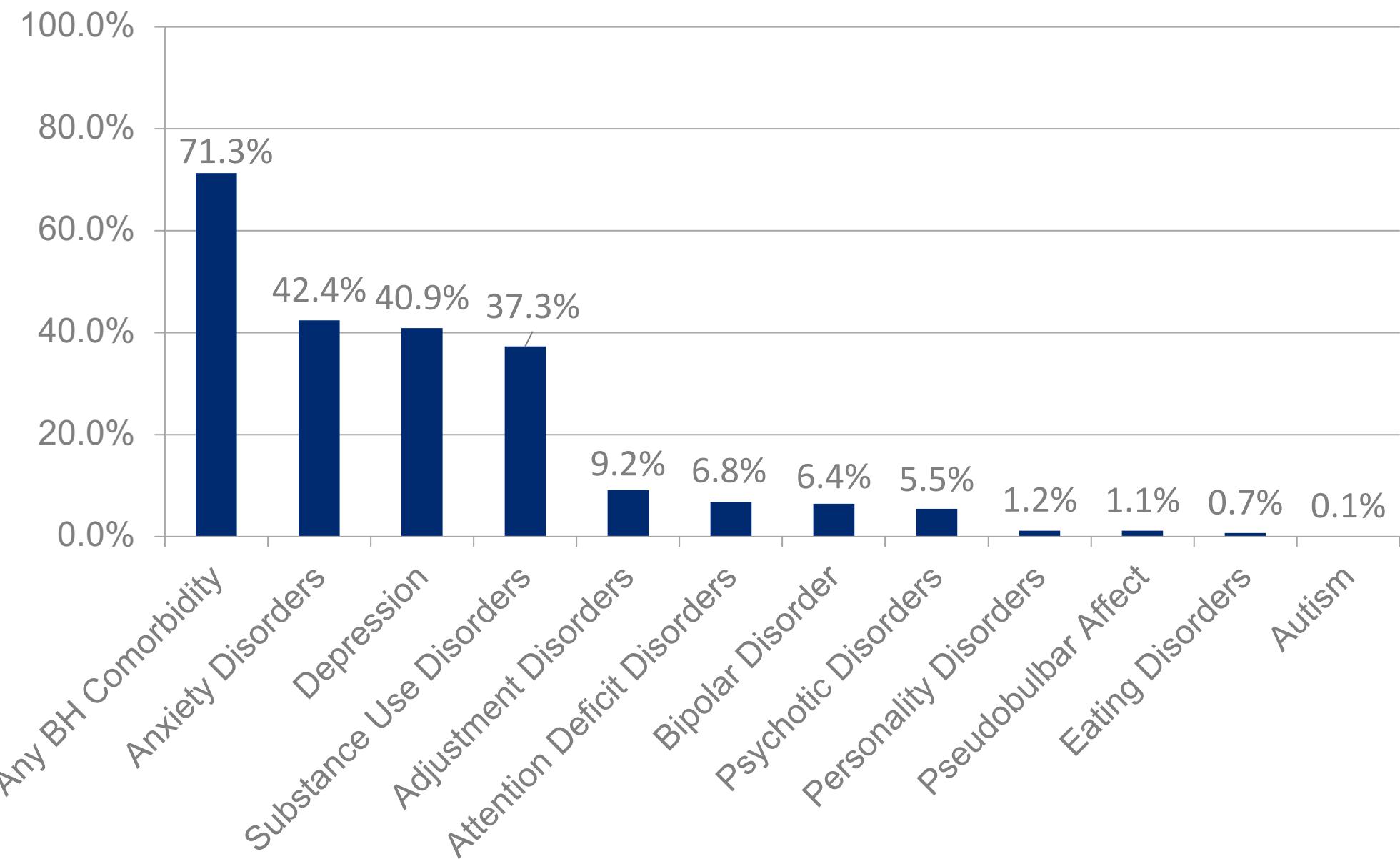


Figure 2. Proportion of Patients with MS SMHC with Behavioral Health (BH) Medication

