

Effects of mental comorbidities on initiating disease-modifying therapies: a population-based study

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Objective

To assess impact of mental comorbidities on DMT initiation in MS patients in a 5-year cohort study based upon data from the French national health insurance.

Method

MS patients (prevalent and incident) were identified between 2010 and 2015 in the French national health insurance databases following a specific algorithm. Index date was the first recorded MS claim. Mental comorbidities were considered as present if the following criteria occurred at least 3 times over the period: having LDD status for psychiatric affection, having at least two reimbursements for treatment associated with mental comorbidities, having at least one hospital admission in relation with mental comorbidities. Logistic regression models were performed to examine the association between mental comorbidities and DMT initiation adjusted for sex, age at index date, others comorbidities (Charlson's score), and two contextual socio-economic indicators (social deprivation index and density of general practitioners, both at the level of the city of residence).

Results

The cohort included 107,714 patients with MS (71% of women) with a median age at index date of 46 years. The overall prevalence of mental comorbidities was 31% of MS patients. From multivariate analyses, we found an association between the presence of mental comorbidities and the rate of DMT initiation, as well as an interaction between sex and presence of mental comorbidities. Sex-stratified analyses showed an increased DMT initiation in women (OR 1.08, 95% CI 1.04-1.12) with mental comorbidities compared to those without mental comorbidities while a decrease in DMT initiation was observed (OR 0.90 95% CI 0.85-0.96) in men with mental comorbidities.

Discussion

Presence of mental comorbidities impacts the rate of initiation of DMTs in MS, with differential effect between men and women. Further analyses will be performed to assess the effects of mental comorbidities on the delay to initiating a DMT.