

Obesity and MS

Multiple sclerosis (MS) is a chronic neurological disorder, often affecting young people.

Comorbid disorders such as depression, anxiety and hypertension are common and can affect disease course, treatment, and quality of life (QOL) of people with MS (PwMS). The associations between comorbidities, body mass index (BMI) and health outcomes are not well studied in MS, although research shows most PwMS are overweight.

Most data on the prevalence of comorbidities and obesity in PwMS comes from North American populations. This study describes the prevalence of comorbidities, overweight and obesity and associations with modifiable factors in an international sample of PwMS recruited online through social media, MS societies and websites.

The online survey consisted of validated and researcher-devised instruments to assess self-reported health outcomes and lifestyle behaviors. Of the 2399 respondents, 22.5% were overweight, 19.4% were obese and 67.2% reported at least one comorbidity, with back pain (36.2%), depression (31.7%), anxiety (29.1%) and arthritis (13.7%) most prevalent and most limiting in daily activities. Obesity and most comorbid disorders were significantly more prevalent in North America.

Obese participants were more likely to have comorbidities, especially diabetes (OR 4.8) and high blood pressure (OR 4.5) but also depression (OR 2.2). Being overweight, obese, or a former, or current smoker was associated with an increase in the number of comorbidities; while healthy diet, physical activity (borderline significant) and moderate alcohol consumption were associated with decreased number of comorbidities.

Increasing number of comorbidities was related to worse QOL, increased odds of disability and prior relapse. Obese PwMS had higher odds of disability and lower QOL. The associations between BMI, comorbidities and health outcomes are likely to be bi-directional and associated with lifestyle behaviors.

Preventing and treating comorbid disorders and obesity in PwMS is warranted, and advice regarding healthy and risky lifestyle may assist in improving health outcomes.