



Association between comorbidities and health-related quality of life in patients with multiple sclerosis

Omid Mirmosayyeb, Mahdi Barzegar

Isfahan Neurosciences Research Center, Isfahan University of Medical Sciences, Isfahan, Iran

Background: Multiple sclerosis (MS) is a debilitating disease accompanied by physical and mental comorbidities. Little is known about the relation between different comorbidities and health-related quality of life (HRQOL) in MS patients. Therefore, we designed this study to assess the association between comorbidities and HRQOL.

Methods: In this cross-sectional study, of 976 MS patients attending the MS clinic of Kashani Hospital in Isfahan, Iran was assessed. The data on comorbidity were extracted from patients' medical records. The 36-Item Short Form Survey (SF-36) was used to measure HRQOL. Firstly, the association between each comorbidity and HRQOL was assessed. Then, the comorbidities were categorized into physical, psychiatric, and autoimmune, and the association of each comorbidity group with HRQOL was evaluated.

Results: The mean (SD) age and disease duration were 37.58 (9.22) and 7.41 (5.24); most of the patients were female (82.8%) and had a relapsing course (77.1%). The most common comorbidity was migraine (13.6%), followed by hypothyroidism (13.5%), OCD (13.5%), and anemia (11.5%). There was a significant association between the physical component score (PCS) of HRQOL and reduced epilepsy, coronary artery disease, eye diseases, obsessive-compulsive disorder (OCD), major depressive disorder (MDD), and borderline personality disorder. Regarding mental component (MCS), ovarian failure, polycystic ovary syndrome, OCD, and MDD had an association with low MCS. After categorization, both physical and psychiatric comorbidities were related to less PCS and MCS score. However, no significant association between autoimmune comorbidities and HRQOL was found.

Conclusion: Our results show a significant association between comorbidities and HRQOL in MS patients.