Multiple sclerosis: depression and disability are globally shared issues of concern

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While multiple sclerosis (MS) is more common among Caucasian populations, its prevalence is increasingly noted in ethnic groups that had previously been considered to have a low frequency of the disease. Epidemiologic studies indicate a considerable augmentation of MS presence in areas such the Middle East[1] and Latin American countries[2]. Along with the general clinical effects of this complex neurological disorder is the impact exerted by some of its comorbid neuropsychiatric manifestations particularly depression, described as affecting three times higher MS patients than the general population[3]. Literature and general perceptions had suggested clinical depression, although chronic in most MS cases, was unrelated to disability progression or disease course[4,5].

A Saudi Arabia study[6] published in Neuroimmunology and Neuroinflammation, acquired data from all geographic regions of the Kingdom involving 598 MS patients, and finding that 97.7% had some degrees of depression as assessed with the patient health questionnaire, a reliable and valid measure of depression severity. In this study, most had mild-to-moderate depression. The Saudi Arabian investigators correlated these data with scores obtained from disability quantified with the patient determined disease steps which has a strong correlation with the scores derived from the expanded disability status scale, the cardinal marker of neurological disability in MS. There was a significant association between patients’ level of neurological disability and severity of depression (P < 0.001). Interestingly, none of the patients reported absence of depression had a moderate or severe disability while those with moderately severe or severe depression had the highest percentages of severe disability. Aspects that escaped the authors explanation was the fact that severe depression was more prominent in patients residing in the northern areas of the country and that 13% of the subjects were foreigners, their country origin was not reported. Saudi Arabia has a medium to high MS prevalence (≥ 40/100,000)[7] has substantial immigrant population from nearby
The Saudi Arabian study provides the first-time evidence of a direct and significant relationship between depression and neurological disability in MS patients. In this sample, all the patients were being treated with a disease modifying therapy. The association of depression with the medication class remains unclear although the only two cases receiving Alemtuzumab (Lemtrada®) scored with severe depression and the highest percentages of moderately severe and severe depression were noted with β interferons 1-a (Avonex®, Rebif®) and 1-b (Betaferon®), as well as the oral product Dimethyl-fumarate (Tecfidera®). The presence of depression with its tremendous variety of emotional states in the majority of people with MS, is a factor requiring early identification and appropriate management in view of the impact to a person’s quality of life and it is associated with progression of disease as well as neurological disability.

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Conflicts of interest

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