

LETTER TO THE EDITOR**The Combinational Role of Vitamin D and Other Conditions in Multiple Sclerosis Patients****Chrissa Sioka^{1*}****OPEN ACCESS**

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In a study by Ayele et al, the authors described low vitamin D (Vit D) in 96% of 25 Ethiopian multiple sclerosis (MS) patients, with mean age of 35.8 years (1). Among them, 50% of the patients had severe hypovitaminosis D. Furthermore, lower levels of Vit D were found in older patients and with increased duration of their disease. As the authors state, little is known about MS in Ethiopia (1).

Vitamin D is necessary for bone health and mediates its function via the Vitamin D Receptor (VDR). The VDR gene may exhibit several polymorphisms, some of which have been associated with MS and osteoporosis (2,3). MS patients exhibit increased frequency of low bone mineral density (BMD) which may lead to osteoporosis compared to control individuals, with male patients affected in both lumbar spine and hip, whereas the females are predominantly affected in the hip (4,5). In female patients, however, other factors except low Vit D may influence BMD, such as gynecological factors (6), similarly with healthy females (7,8). Furthermore, MS patients exhibit several mood disorders, with depression seen most often, and also linked to lower Vit D levels (9). A recent study has also described an association between low Vit D levels, depression and osteoporosis with multiple sclerosis (10).

Thus, since the authors stated that it is little known about MS in Ethiopia, I believe that it would be imperative to further study the vitamin D gene polymorphisms, BMD, osteoporosis, and depression, in Ethiopian patients with MS. Future studies should focus on identifying the molecular/genetic factors behind this association in the Ethiopian population.

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