

OR1

Prevalence and Incidence Rates of Multiple Sclerosis in Lebanon.

Maya Zeineddine^{1,2}, Amal Al Hajje², Nabil El Ayoubi¹, Wael Hanna³, Bassem Yamout¹

¹American University of Beirut Medical Center, Beirut, Lebanon, ²Lebanese University, Beirut, Lebanon, ³American University of Beirut, Beirut, Lebanon

Background: The prevalence of multiple sclerosis (MS) has been assessed in many countries of the Middle East mostly in Kuwait, Jordan, Saudi Arabia, Oman, Lybia, Tunisia, Iraq and the United Arab Emirates. The prevalence of MS in Lebanon however, is still unknown mainly due to lack of national registries. Based on the Kurtzke classification, Lebanon is located in a low-risk zone for MS.

Objective(s): To determine the incidence and prevalence of MS in Lebanon based on a 2018 population census.

Method(s): Lebanese patients diagnosed with MS between January 2018 and December 2018 were identified using the database of the Ministry of Public Health (MOPH), National Social Security Fund (NSSF), Lebanese Army, Cooperative of Government Employees (COOP), Internal Security Forces, and Lebanese General Security based on the reimbursement of disease-modifying therapies (DMTs) by these governmental third-party payers. Nearly all patients with MS in Lebanon receive their therapies through one of these governmental institutions. The crude, age- and sex-specific 2018 prevalence and incidence rates among Lebanese patients were calculated.

Result(s): 2248 MS patients were identified of whom 1454 (67.1%) were females and 712 (32.9%) males (female: male ratio 2:1) with a mean age of 41.8 ± 12.96 years. The 2018 prevalence rate of MS was 62.91 cases per 100,000 persons (95% CI: 60.41 - 65.41). The pediatric prevalence of MS was 2.23 per 100,000 (95% CI: 1.41- 3.05). There was a peak in prevalence rate among patients aged 35-44 years. The overall incidence rate of MS in Lebanon was 8.36 cases per 100,000 (95% CI: 7.45 – 9.27), representing 324 newly diagnosed patients in 2018. The mean age at onset of MS was 34.5 ± 12.5 years.

Conclusion: This is the first study to assess the prevalence and incidence rates of MS in Lebanon, confirming that Lebanon is a moderate to high-risk area for MS. Those high rates are commensurate with the recently published studies from the Middle East, pointing to a significant rise in the incidence and prevalence of this disease in our region.