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**An Increase in the Prevalence of Multiple Sclerosis Has Moved Kuwait to a High-Risk Zone**

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**Background:** The national Multiple Sclerosis (MS) registry continues to assess the change in epidemiological status. The last reported data was in 2012.

**Objective(s):** We aimed to update the prevalence and incidence rates of MS among Kuwaiti nationals

**Method(s):** Cross-sectional study was conducted by extracting data from the national registry. Patients with a diagnosis of MS according to 2017 revised McDonald criteria were identified. Patients with possible MS or other demyelinating disorders were excluded. Population census with a cutoff on 30th June 2018 was obtained from Kuwait Bureau of Statistics to determine the number of people at risk. The crude, age- and sex-specific prevalence and incidence rates among Kuwaiti Patients were calculated.

**Result(s):** 1722 MS patients were identified of which 1454 (84.4%) were Kuwaitis. Women represented 66.8% of the cohort with female to male ratio of 2.01:1. The mean age of the cohort was  $36.7 \pm 10.7$  years while the mean age at onset and disease duration were  $27.2 \pm 8.8$  and  $10.1 \pm 7.3$  years respectively. The point prevalence of MS was 104.88 (95% CI: 89.5-121.9) per 100,000 persons, which increased 1.6 times since 2012. Women had a prevalence of 137.1 (95% CI: 129.3-145.3) compared to men 71.2 (95% CI: 65.3-77.6). The prevalence among the age ranges of  $\leq 19$ , 20–29, 30–39, 40-39, 50-59, and  $\geq 60$  years were 15.5, 147.8, 271.4, 230.9, 174.4 and 36.9 per 100,000 persons respectively. The incidence of MS was 5.39 (95%CI: 4.3-6.8) per 100,000 persons. The 5-year incidence was 6.4, which has been stable since the last reported rate.

**Conclusion:** There is an ongoing increase in the prevalence of MS. According to the Kurtzke geographical distribution, Kuwait is considered a high-risk geographical area for MS. Women had a higher prevalence with a peak among patients aged 30–39 years. The incidence rate has been stable throughout the last 5 years.