

Specificities of Ischemic Stroke Risk Factors in Arab-Speaking Countries.

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Abstract

BACKGROUND:

Stroke is largely preventable, and therefore, a better understanding of risk factors is an essential step in reducing the population stroke rate and resulting disease burden in Arab countries.

SUMMARY:

We performed 2 separate analyses in 2 similar populations of patients with noncardioembolic ischemic stroke. This first involved 3,635 patients in the Outcomes in Patients with TIA and Cerebrovascular disease (OPTIC) registry (followed for 2 years), with baseline collection of the usual risk factors and 5 socioeconomic variables (unemployment status, residence in rural area, living in fully serviced accommodation, no health-insurance coverage, and low educational level). The second involved patients in the PERFORM trial (n = 19,100 followed up for 2 years), with baseline collection of the usual risk factors and 1 socioeconomic variable (low educational level). The primary outcome was a composite of nonfatal stroke, nonfatal myocardial infarction, or cardiovascular death. Stroke risk factors were more prevalent in patients in Arab countries. The incidence of major cardiovascular events (MACE; age- and gender-adjusted) was higher in Arab countries (OPTIC, 18.5 vs. 13.3%; PERFORM, 18.4 vs. 9.7%; both $p \leq 0.0001$). These results remained significant after adjustment on risk factors and were attenuated in OPTIC after further adjustment on socioeconomic variables (hazard ratio 1.24; 95% CI 0.98-1.55; $p = 0.07$). Key Messages: Patients with ischemic stroke living in Arab countries had a lower mean socioeconomic status, a much higher prevalence of diabetes mellitus, and a higher rate of MACE compared with patients from non-Arab countries. This finding is partly explained by a higher prevalence of risk factors and also by a high prevalence of poverty and low educational level.