



Author Gate



Letter to the Editor

Stroke and migraine are leading neurological conditions on a global scale

Dear Sir,

Neurological disorders are now being more widely recognized as significant contributors to mortality and disability on a global scale. The Global Burden of Diseases, Injuries, and Risk Factors Study (GBD) 2016 provided the most comprehensive and up-to-date estimates of the global, regional, and national burden from neurological disorders. According to the findings of the study, the two largest contributors of neurological DALYs (disability-adjusted life-years) were stroke (42.2% [38.6–46.1]), migraine (16.3% [11.7–20.8]). Stroke ranked first globally among neurological disorders in terms of age-standardised DALY rates in 19 of 21 world regions except in Australasia and Western Europe. Migraine ranked first in Australasia and Western Europe. Stroke burden rapidly increased up to the age of about 80 years, and was the dominant cause of neurological burden between ages 60 and 84 years, more so in males than females. Migraine and tension-type headaches were large contributors in young and middle-aged adults, with much higher numbers in females than males.¹

Globally, stroke is a leading cause of mortality and disability and there are substantial economic costs for post-stroke care.² In 2016, there were 5.5 million (95% UI 5.3 to 5.7) deaths and 116.4 million (111.4 to 121.4) DALYs due to stroke. There were 80.1 million (74.1 to 86.3) prevalent cases of stroke globally in 2016; 41.1 million (38.0 to 44.3) in women and 39.0 million (36.1 to 42.1) in men. Although age-standardised mortality rates have decreased sharply from 1990 to 2016, the decrease in age-standardised incidence has been less steep, indicating that the burden of stroke is likely to remain high. Future iterations of GBD will include separate estimates for subarachnoid haemorrhage and intracerebral haemorrhage, estimates of transient ischaemic attack, and atrial fibrillation as a risk factor.³

As the leading cause of disease burden, affecting 40% of the population, nervous system conditions require global public health attention. Disorders affecting the nervous system require urgent implementation of effective prevention and treatment strategies. Further research is needed on the epidemiology, modifiable risks, causes, and effective prevention, treatment, and rehabilitation strategies for stroke and migraine in different populations.

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Conflict of Interest


The author declares no conflicts of interest relevant to this article.

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