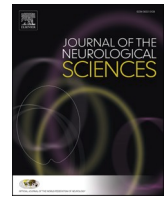


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Letter to the Editor

World Brain Day 2024: Promoting brain health and prevention

Dear Editor

The World Federation of Neurology (WFN) is celebrating World Brain Day (WBD) on July 22, 2024. WBD 2024 is devoted to “Brain Health and Prevention” and hopes to make readers aware of the importance and role of optimizing brain health over the lifespan for the prevention of neurological disease.

WBD 2024 is held in collaboration with the six global WFN regions and underscores the theme of brain health and prevention, aiming to promote brain health. WBD 2024 highlights the critical need for prevention of cognitive decline and neurological disease, which is one of the pillars of the World Health Organization's Intersectoral Global Action Plan on Epilepsy and Other Neurological Disorders (IGAP) [1,2]. The six WFN regions are at the forefront of this initiative, spearheading activities and educational efforts to enhance brain health and prevent neurological disorders.

1. The global burden of neurological disorders

A significant study published by *The Lancet Neurology* in 2021 revealed that over 3 billion people worldwide were living with a neurological condition. The study reported an 18% increase in disability-adjusted life years (DALYs) due to neurological conditions since 1990 [3,4]. This rise underscores the urgency of addressing these conditions through effective prevention.

The Lancet Neurology study examined 20 modifiable risk factors for neurological conditions that are potentially preventable by reducing known risk factors, such as stroke, dementia, multiple sclerosis, Parkinson's disease, encephalitis, and meningitis. The findings emphasize the importance of Community-Level Interventions to eliminate key risk factors. For example, high systolic blood pressure and ambient and household air pollution were identified as significant contributors to stroke risk, and mitigation of these factors had the potential to prevent up to 84% of stroke DALYs [3]. Other interventions consist of Promotion of Healthy Lifestyles, Environment and Improving Air Quality, and Reducing Exposure to Harmful Substances.

The role and need for brain health in the regions vary. As examples, the American Academy of Neurology [5] and the European Academy of Neurology [6] have each initiated robust brain health initiatives. The aim of these campaigns is to promote the awareness of brain health and bring it from the society level to the highest political levels. In Europe, Norway, Switzerland, Germany, Italy, and Belgium have led such successful initiatives.

The regional neurological societies have a pivotal responsibility to create, implement, and disseminate educational and advocacy campaigns that engage communities and utilize an array of communication channels to bring the crucial issue of brain health and disease prevention to political and non-governmental stakeholders, with the objective of

influencing policies that support brain health and initiatives to improve public health education.

2. WBD 2024 is a call to action for brain health and prevention

WBD 2024 represents a call to action for stakeholders across all regions and sectors to prioritize brain health and prevention. Through advocacy, education, and community engagement, we can empower individuals and communities to adopt recommendations, such as healthy lifestyles, and reduce the burden of neurological disorders worldwide.

The call is also directed to research and scientific societies for innovation and to enlarge the spectrum of prevention for an increasing number of diseases. The example of stroke and stroke prevention has left a high benchmark for successful prevention.

CRediT authorship contribution statement

Tissa Wijeratne: Conceptualization, Writing – original draft. **David Dodick:** Writing – review & editing. **Steven L. Lewis:** Writing – review & editing. **Alla Guekht:** Writing – review & editing. **Wolfgang Grisold:** Conceptualization, Project administration, Writing – review & editing.

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