

Stroke and Potentially Preventable Dementias Proclamation

Updated World Stroke Day Proclamation

Vladimir Hachinski, MD, DSc; on behalf of the World Stroke Organization

The growing epidemic

Stroke¹ and some dementias may be preventable² but are rising globally.

- Aging, unhealthy diets, tobacco use, and physical inactivity fuel a growing epidemic of high blood pressure, high cholesterol, obesity, diabetes mellitus, stroke, heart disease, and dementia.³
- Worldwide, stroke and potentially preventable dementias are the leading causes of serious disability, sparing no age, sex, ethnic origin, or country.⁴
- The incidence of stroke is falling by half in high-income countries but increasing in low- and middle-income countries⁵ that can least afford to deal with the consequences.
- Millions of deaths and much disability could be averted over the next decade if what is already known is applied.

Join forces to prevent stroke and potentially preventable dementias

The same few risk factors account for the leading health problems of the world, but research about the common threat occurs in isolation from other major chronic diseases.

The common risk factors, tobacco use, alcohol misuse, physical inactivity, and diets high in salt, fats, and sugar, contribute to stroke, heart disease, diabetes mellitus, chronic lung disease, and cancer⁶ and pose a risk of dementia. Therefore, we need to:

- Support and catalyze the United Nations and the World Health Organization campaigns against noncommunicable diseases.
- Prevent obesity⁷ and promote diets that delay age-related diseases.⁸

Ensure what we know becomes what is done

Prevention is the most readily applicable and affordable part of our knowledge, but prevention is neglected. Therefore, we need to:

- Encourage healthy environments to support healthy habits and lifestyles.

- Provide drugs for primary and secondary prevention for cerebrovascular disease, an important risk factor for dementia. Regrettably, these drugs are neither accessible nor affordable in many developing countries or used optimally in developed ones.
- Discourage unproven, costly, or misdirected practices that drain resources from more cost-effective approaches.
- Educate health professionals at all levels through a common vocabulary, a core curriculum, on-line materials, long-distance mentoring, and opportunities for learning in clinical practice settings.

Recognize the uniqueness of stroke

The different types of stroke, ischemic (blockage of arteries), bleeding into (intracerebral hemorrhage) and around the brain (subarachnoid hemorrhage) have specific courses requiring special treatment and rehabilitation. Therefore, we need to:

- Study their causes and understand their mechanisms.
- Organize skilled teams of physicians, neurosurgeons, neurointerventionalists, and rehabilitation specialists to manage these types of stroke.
- Incorporate the prevention of poststroke dementia as an integral part of stroke care.

Prevent, identify, and treat potentially preventable dementias

Subclinical (silent) strokes occur 5 times as often as clinical (obvious) strokes⁹ and may affect thinking, mood, and personality.

All major dementias have a vascular component, including 80% in Alzheimer disease.¹⁰ Therefore, we need to:

- Identify and treat the vascular component of all cognitive impairments.
- Understand that the presence of a vascular component doubles the chances that silent neurodegenerative pathology will lead to dementia.¹⁰
- Manage the common risk factors for stroke, vascular cognitive impairment, dementia (tobacco use, high blood pressure, high cholesterol, physical inactivity, obesity, and diabetes mellitus), and atrial fibrillation. Encourage frequent blood pressure measurements and checking for an irregular heartbeat to detect atrial fibrillation.
- Enhance protective factors, such as education and a socially and physically healthy environment.
- Integrate stroke and dementia prevention strategies because preventing stroke may prevent some dementias.¹¹

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Build transdisciplinary teams for stroke and dementia care and rehabilitation

Organized stroke and dementia care improves outcomes but remains the exception nearly everywhere. Therefore, we need to:

- Establish simple but comprehensive stroke units that include rehabilitation and stroke prevention clinics. Build expertise in rehabilitation and management of complications, including poststroke epilepsy. Stroke units have long proven their worth, even in their most basic form.¹²
- Encourage transdisciplinary teams to develop expertise and translate evidence into practice.
- Build a healthcare system that responds to the needs of each individual challenged by the effect of stroke and/or dementia and facilitate their optimal functioning in society.

Support and inform people living with stroke, their caregivers, and families

Stroke often results in long-term disability affecting all aspects of daily living. Yet people affected by stroke are often not supported or informed about their stroke or their options to maximize their recovery. Therefore, we need to:

- Support people affected by stroke and their caregivers in their recovery, in their return to work, and in life after stroke.
- Work to ensure that people affected by stroke are included in all aspects of society.
- Encourage systems to connect stroke survivors to each other and caregivers.

Actively engage the public around the world

The public, acting as individuals, voters, or advocates, can best influence their own future risk and care but not enough is being done. Therefore, we need to:

- Increase the knowledge of the public, policymakers, and health professionals about causes and symptoms of stroke and dementia. The symptoms of stroke are painless and at times, transient; however, sudden weakness or numbness in the face, arm or leg, sudden inability to speak or understand speech, loss of vision in one eye, or sudden loss of balance are as compelling an emergency as crushing chest pain or sudden, severe unusual headache.
- Send a unified, consistent message throughout the world: stroke and some dementias may be preventable.

Whereas; stroke and potentially preventable dementias are global epidemics that threaten lives, health, and quality of life.

Whereas; much can be done to prevent and treat stroke and potentially preventable dementias and rehabilitate those who suffer from these.

Whereas; professional and public awareness is the first step to action.

We hereby proclaim an annual

WORLD STROKE DAY

Updating Committee

Vladimir Hachinski (Chair), Natan Bornstein, Michael Brainin, Stephen Davis, Geoffrey Donnan, Gloria Ekeng, Marc Fisher, Werner Hacke, Sheila Martins, Erin Lalor, Ming Liu, Bo Norrving, Jeyaraj Pandian, Lawrence Wong, Shinichiro Uchiyama, and Bernard Yan.

List of supporting organizations for the update

Alzheimer's Disease International, World Federation of Neurosurgical Societies, World Federation of NeuroRehabilitation, American Academy of Neurology, International Brain Research Organization, World Federation of Neurology, American Heart Association/American Stroke Association, World Psychiatric Association, World Heart Federation, The Heart and Stroke Foundation of Canada, Alzheimer's Association, European Academy of Neurology, Alzheimer Society of Canada, Public Health England, Alzheimer's Society (UK), Stroke Association (UK), European Stroke Organisation (ESO), European Brain Council, International Society of Vascular Behavioural and Cognitive Disorders, the Asian Society Against Dementia, Hypertension Canada and World Hypertension League.

Disclosures

None.

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Correction

In the article by Hachinski (Hachinski V; World Stroke Organization. Stroke and potentially preventable dementias proclamation: updated World Stroke Day proclamation. *Stroke*. 2015;46:3039–3040. DOI: 10.1161/STROKEAHA.115.011237.), which published online on October 26, 2015, and appeared in the November 2015 issue of the journal, a correction was needed.

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