

WORLD STROKE DAY PROCLAMATION (Cont.)

BUILD TRANSDISCIPLINARY TEAMS FOR STROKE CARE AND REHABILITATION ORGANIZED STROKE CARE IMPROVES OUTCOMES

but remains the exception nearly everywhere.

Therefore we need to:

- Establish simple but comprehensive stroke units. Stroke units have long proven their worth, even in their most basic form.
- Encourage transdisciplinary teams to develop expertise and translate evidence into practice.
- Build a health care system that responds to the needs of each individual dealing with the impact of stroke and rejoining society.

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 awareness of the public, policymakers, and health professionals about the causes and symptoms of stroke. The symptoms of stroke are painless and at times transient ñ but 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 is a preventable and treatable catastrophe

Whereas; stroke is a global epidemic that threatens lives, health, and quality of life.

Whereas; much can be done to prevent and treat stroke, and rehabilitate those who suffer one.

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

We hereby proclaim an annual
WORLD STROKE DAY



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Chair, Stroke Affairs and Liaison Committee, World Federation of Neurology

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For more information, please contact:

WSO Administrative Office
C/o Kenes International
1-3 rue de Chantepoulet, P.O. Box 1726
CH-1211 Geneva 1, Switzerland
Tel: +41 22 906 9166
Fax: +41 22 732 2850
Email: admin@world-stroke.org

www.world-stroke.org

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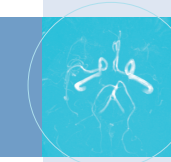
WORLD STROKE DAY

A day with a message for every day:

STROKE IS A TREATABLE AND PREVENTABLE CATASTROPHE

World Stroke Day 2008
"Little Strokes, Big Trouble"





World Stroke Day 2008

"Little Strokes, Big Trouble"

Editorial published in *Stroke* - September 2008

Vladimir Hachinski, MD, DSc, Editor-in-Chief

World Stroke Day is a day with a message for every day: "Stroke is a treatable and preventable catastrophe." This year and every subsequent year it will be on October 29th. The theme for this year is "Little strokes, big trouble".

During the World Stroke Congress in Vancouver in 2004, a working group was organized to develop a global agenda for stroke. This agenda was subsequently incorporated into a World Stroke Proclamation launched in Cape Town on October 26, 2006 (supplemental video, available online at <http://stroke.ahajournals.org>).

The 2007 World Stroke Day theme was "Stroke is a treatable and preventable catastrophe and hypertension is its most common and treatable factor". This year the stroke global agenda will be highlighted at the forthcoming 6th World Congress of Stroke, Vienna, September 24 to 27, 2008.

Although each year all aspects of stroke are addressed, a particular theme is selected for emphasis. This year it emphasizes one of the items of the World Stroke Day Agenda: "Recognize, treat and prevent vascular cognitive impairment. Subclinical (silent) strokes occur five times as often as clinical (obvious) strokes and may affect thinking, mood and personality" (World Stroke Day Proclamation appendix).

By now it has become evident that "silent" strokes are the most common type of strokes. Results from 3 longitudinal studies suggest that 770 000 clinical strokes, about 9,000,000 "silent" infarcts and approximately 2,000,000 "silent" hemorrhages occurred in the United States in 1998.¹ A recent article from the Framingham Study suggests that 1 in 10 individuals, stroke free and living in the community, with a mean age of 62±9 years have a "silent" stroke.²

The word "silent" is a misnomer. When subjects with "silent" infarcts are examined they have subtle neuropsychological and neurological deficits.^{3,4} It is preferable to talk about "subclinical strokes". Subclinical strokes correlate with the Framingham Stroke Risk Profile,² but other factors may contribute to vascular cognitive impairment.

If ignored, little strokes could spell big trouble. One subclinical stroke is associated with increased chance of having others and of experiencing a clinical stroke and/or dementia.³ The combination of subclinical strokes and subclinical Alzheimer lesions may be a background for the association of stroke and dementia given that the lifetime risk of developing either or both is one in three.⁵

From a practical viewpoint it becomes important to recognize that some of the symptoms that elderly individuals manifest, such as changes in judgment, in intellectual ability, personality change, particularly depression, may be associated with subclinical strokes and white matter changes in the brain.^{3,6}

A 5-minute screening instrument for vascular cognitive impairment and Alzheimer disease is recommended, which can be followed-up by a 30- and 60-minute battery if required.⁷ If the patient shows executive dysfunction, it may justify brain-imaging and identification of possible subclinical strokes which then should be treated and prevented based on the cause, ie, cardiac, cervical and cerebral and associated risk factors.

We should treat risk factors with renewed vigor and at that same time commit ourselves to discover whatever differences that may exist between clinical and subclinical strokes. It may not be simply a question of infarct size, but of mechanisms and actions on different brain substrates, eg, the presence of amyloid, which experimentally can magnify the size and inflammatory response of cerebral infarction.⁸

We need to implement what we know and learn as we do it, so that we can continue to improve the treatment and prevention of all types stroke.⁹

World Stroke Day, by focusing on "Little strokes, big trouble", emphasizes the likelihood that the earlier we intervene, the more likely we are to be successful and we will be acting on an ancient injunction, "Act before disease has gained strength" (Publius Ovidius Naso, Roman poet, 43 BC-17 AD). The opinions in this editorial are not necessarily those of the editors or of the American Heart Association.

From the Stroke Editorial Office, UWO Research Park, London, Ontario, Canada.

Correspondence to Vladimir Hachinski, MD, DSc, Editor-in-Chief, Stroke Editorial Office, UWO Research Park, 100 Collip Circle, Suite 116, London, ON N6G 4X8, Canada. E-mail stroke@lhsc.on.ca (*Stroke*. 2008;39:2407-2408.)

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STROKE: A PREVENTABLE AND TREATABLE CATASTROPHE

THE GROWING EPIDEMIC

STROKE IS PREVENTABLE

but rising globally

- Aging, unhealthy diets, tobacco use, and physical inactivity, fuel a growing epidemic of high blood pressure, high cholesterol, obesity, diabetes, stroke, heart disease and vascular cognitive impairment.
- Worldwide, stroke accounts for 5.7 million deaths each year and ranks second to ischemic heart disease as a cause of death; it is also a leading cause of serious disability, sparing no age, sex, ethnic origin, or country.
- Four out of five strokes occur in low and middle income countries who can least afford to deal with the consequences of stroke.
- If nothing is done, the predicted number of people who will die from stroke will increase to 6.7 million each year by 2015.
- Six million deaths could be averted over the next 10 years if what is already known is applied.
- Much can be done to prevent and treat stroke and rehabilitate those who suffer the devastating consequences of stroke.

JOIN FORCES TO PREVENT STROKE

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, physical inactivity, and unhealthy diet, contribute to stroke, heart disease, diabetes, chronic lung disease, cancer, and pose a risk for Alzheimer's disease.

Therefore we need to:

- Co-ordinate the efforts of all disease-oriented organizations working to prevent the rise of these underlying risk factors.

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.
- Use effective drugs for both primary and secondary prevention. Regrettably these drugs are neither accessible nor affordable in many developing countries, nor used optimally in developed ones.
- Discourage unproven, costly, or misdirected practices, which 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 deal with these special types of stroke.

RECOGNIZE, TREAT AND PREVENT VASCULAR COGNITIVE IMPAIRMENT
SUBCLINICAL ("SILENT") STROKES OCCUR FIVE TIMES AS OFTEN AS CLINICAL (OBVIOUS) STROKES, AND MAY AFFECT THINKING, MOOD AND PERSONALITY.

Therefore, we need to:

- Recognize that vascular cognitive impairment (VCI) occurs commonly and at times hastens Alzheimer's disease (AD)
- Manage the common risk factors for stroke, VCI and AD (tobacco use, high blood pressure, high cholesterol, physical inactivity, obesity and diabetes).