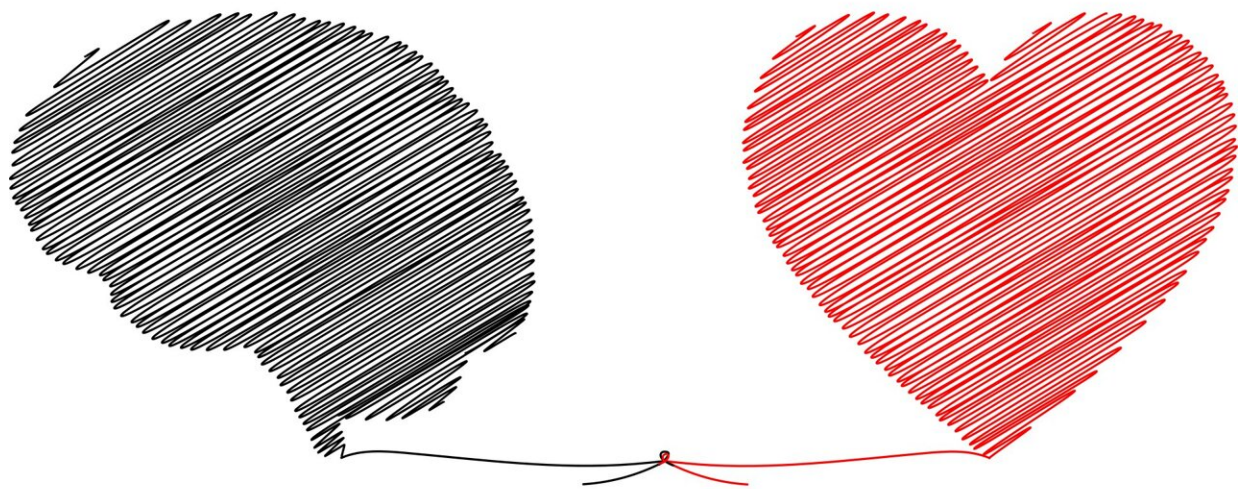


# Making a lifetime of good brain health a global priority

December 22 2021, by Laura Williamson

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Credit: Pixabay/CC0 Public Domain

Twenty years ago, the Canadian province of Ontario launched an aggressive campaign to tackle stroke from every angle: It hyped prevention and awareness; beefed up its acute care practices and response times; and increased access to post-stroke rehabilitation.

It worked. Stroke rates fell 32 percent within a decade. But that wasn't all. Dementia rates also fell—by about 7 percent—confirming what Dr.

Vladimir Hachinski, a research pioneer in this field, already suspected: Preventing strokes helps prevent dementias.

Now, Canada is exploring how to apply this lesson nationwide. And Hachinski, the neuroscientist leading the effort, has an even bigger vision. He wants the whole world to focus not solely on [stroke](#) and [dementia](#) prevention but on any and everything that can go wrong with the brain—and how to keep things going right.

"You need your brain to be healthy," Hachinski said. "There is no health without brain health."

The idea is starting to gain traction.

"The World Health Organization recognizes brain health as a major issue," said Dr. Victor Dzau, president of the U.S. National Academy of Medicine and part of a loose coalition of leading medical experts pushing governments and [research institutions](#) to make it a global priority. "People are getting very excited about this."

"Every year, there are more strokes, more heart attacks, more dementias," said Hachinski, who helped form the World Brain Alliance, a coalition of nine of the world's largest brain-focused organizations. "The more we can delay or prevent this, the better we are able to cope because, otherwise, all health care systems around the world will be overwhelmed."

Along with Dzau and others, Hachinski raised the issues in October at the G20 Summit, an intergovernmental forum of the world's 20 largest economies. They plan to do so again at the G7 meeting in June in Germany.

Brain health "doesn't get the attention it deserves, given the magnitude of

the problem," Dzau said. Neurological disorders are a [leading cause](#) of disability and death worldwide.

Dzau co-chairs the Healthy Brains Global Initiative, which seeks to raise \$10 billion over the next 30 years to transform what he considers a fragmented and underfunded "research ecosystem" into a collaborative, interdisciplinary model focused on better brain health over the lifespan.

"Whether we're talking about Alzheimer's disease or schizophrenia, you have to understand how the brain works and when it becomes dysfunctional and why," Dzau said. "Brain health is the overarching umbrella."

At the center of this movement is the [connection between healthy brains and healthy bodies](#)—now firmly established by decades of research, particularly around the link between heart and brain health. Heart disease and stroke share many of the same risk factors as dementia, such as high blood pressure, high blood sugar and a lack of physical activity. Research also shows good psychological health can improve cardiovascular health, while poor mental health can harm it.

Dzau, a cardiologist, and Hachinski, a neurologist, want the world to stop thinking of brain health in terms of individual disorders that develop later in life and start thinking about how to promote good brain health from birth onward.

"The dementia people look at one thing and stroke looks at another and nobody looks at the big picture," said Hachinski, who helped develop a new definition of brain health that goes beyond disease or its absence to encompass neurological health, mental health and physical well-being and how the three interact.

Currently, most research focuses on the diseased brain, rather than ways

to preserve and promote optimal brain health, Hachinski and others wrote in an August 2021 [paper in the journal Alzheimer's & Dementia](#). The authors call for transdisciplinary collaboration among the world's neurologists, psychiatrists, psychologists, neurobehavioral and social behavioral scientists, policymakers and others. One priority, they say, should be to find out why some countries have successfully reduced stroke and dementia cases while others have not, and to apply those lessons globally.

The Canadian-led Dementia Prevention Brain Health Initiative is a first step in that direction. It will map regions of good and poor brain health, dementia, stroke and heart disease by tracking population, environmental, socioeconomic and individual risk factors, along with factors that protect [brain](#) health. And it won't stop at Canada's borders. The effort involves researchers from the United States, United Kingdom and New Zealand to identify cost-effective ways of reducing dementia.

Meanwhile, the Healthy Brains Global Initiative will begin its work with a focus on anxiety and depression in people under the age of 30, based on research showing three-fourths of mental health problems and neurological disorders take root in adolescence and young adulthood.

But that's just the beginning, said Dzaou, who said he sees "a huge need for more impactful research. We need breakthroughs and studies that look at community implementation of solutions."

Both the research—and its implementation—also need to be more equitable and inclusive, he said. "Small clinical trials in white populations are insufficient. We have to build more diverse, living cohorts globally. At least, that's the vision of what we're trying to do."

Even when nations have the knowledge and technology to improve [brain health](#), translating those into positive outcomes equitably can be a

problem, he said. It's either because countries have too little money to do so, or they have poorly structured [health](#) systems that can't get the job done. The United States is a case in point, he said.

"We are pioneers in technology and science and research," Dzau said, "but when it comes to implementation, because our system is so fragmented, it is more challenging."

For example, despite big increases in the use of potentially lifesaving stroke treatments, studies show Black and low-income adults are [less likely to receive them](#). And Black men in the U.S. are 70 percent [more likely to die following a stroke](#) than their white counterparts.

Fixing problems like these on a global scale are what this movement is about, said Dzau. But it won't happen overnight. "We don't have the solutions yet, but we do have the ambition."

**More information:** Abolfazl Avan et al, Brain health: Key to health, productivity, and well-being, *Alzheimer's & Dementia* (2021). [DOI: 10.1002/alz.12478](#)

Provided by American Heart Association

Citation: Making a lifetime of good brain health a global priority (2021, December 22) retrieved 8 July 2024 from

<https://medicalxpress.com/news/2021-12-lifetime-good-brain-health-global.html>

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