

**Public release date: 11-Dec-2006**

Contact: Emma Orpilla

[eorpilla@george.org.au](mailto:eorpilla@george.org.au)

61-299-934-592

[Research Australia](#)

## **New research shows big improvement in survival after stroke**

A new research report by The George Institute for International Health, in collaboration with Auckland City Hospital and The University of Auckland, has revealed a 40% decline in the number of deaths after stroke in the total population of Auckland, New Zealand over the past 25 years. The study attributes the improved survival rate to health care factors associated with an increase in hospital admission and brain imaging during the most severe phase of the illness.

Stroke affects annually around 17 million people globally and is widely recognised as one of the biggest killers in both Australia and New Zealand. In New Zealand, over 7,600 strokes occur each year, while over 53,000 strokes take place in Australia per annum. However, research into stroke rates has shown a steady decline in stroke in many industrialised countries over recent decades, most notably in Caucasian populations, whilst Maori and Pacific populations in New Zealand have experienced a rise in stroke rates. Even with declines in the rate of stroke, the number of strokes occurring is expected to rise, with the ageing of the population and improved survival.

In three separate studies between 1981 and 2003, researchers investigated the rate of short and medium-term survival after stroke and found that the probability of survival increased from 1981, especially in the 28-day period following a stroke. According to Principal Investigator, Professor Craig Anderson, Director of the Neurological and Mental Health Division at The George Institute, the rate of hospitalisation, brain imaging (CT or MRI scans) and medical attention have all increased dramatically over the period. "In 1981, 64% of patients were admitted to hospital and 13% would have brain imaging. In 2003, 92% of patients were being admitted to hospital with 90% receiving scans. This improved level of stroke care has directly benefited stroke sufferers across New Zealand."

However, as the death rate declines, there has been a significant increase in the number of patients with an impaired level of consciousness and motor deficits following stroke. Dr Kristie

Carter, Research Fellow for the study noted that, "We found that a person's level of consciousness at the time of stroke, age and history of pre-morbid dependency, were strong predictors of survival".

"The increased number of stroke survivors in New Zealand is a positive outcome, showing more knowledge of the condition and how to treat it," says Associate Professor Valery Feigin of The University of Auckland's Clinical Trials Research Unit. "However, this also puts an additional burden on resources, both family and community. More needs to be done in preventing strokes and implementing evidence-based management and rehabilitation strategies (for example, Acute Stroke Units). In addition, there needs to be increased awareness of the condition and how to reduce risk factors that can lead to strokes, such as elevated blood pressure, smoking, poor diet etc. Only through this can we reduce the incidence of stroke and ultimately improve stroke outcome."

###

This study was funded by the Health Research Council (HRC) of New Zealand and published in the Cerebrovascular Diseases journal.

Notes to Editor:

The George Institute for International Health is an internationally-recognised health research body, undertaking high impact research across a broad health landscape. The Institute is centrally involved with Australian community health issues in Aboriginal health, ethnic community health, road safety and injury, mental health, ageing, healthcare access, clinical practice in Australian hospitals and health policy development.

It is also a leader in the clinical trials, health policy and capacity-building areas. Its research has a direct, practical impact on a wide range of healthcare, health policy, safety and socio-cultural issues facing Australians.

The Institute is affiliated with The University of Sydney, Sydney South West Area Health Services, and collaborates in its research with other prestige research institutes, clinical authorities and policy centres around the world.

---