

Auckland study finds ethnic divide in stroke rates

The third and latest study in the Auckland Regional Community Stroke (ARCOS) project, run through the Clinical Trials Research Unit at the University of Auckland, showed a 66 per cent increase in incidence rates for Pacific people and a 30 per cent increase for Maori over the past 20 years.

The study into stroke rates forms part of the largest community-based stroke study ever done in the world. Data from the current ARCOS study was combined with stroke studies conducted in Auckland in the early 1980s and 1990s to track trends and early case fatality of stroke in Auckland's population.

Stroke rates have been falling over the past 20 years, but findings from an extensive study have found that Maori and Pacific populations in Auckland are not benefiting from this drop.

Research carried out by HRC Pacific Health PhD scholar Kristie Carter, shows that stroke rates for Pacific people have increased since 1981 to almost double that of NZ Europeans.

Ms Carter assessed data which had been accumulated over a 20 year period from general practitioners, hospital records, questionnaires and interviews.

Ms Carter says the doubling of event rates in Pacific populations is mostly due to increases in the rate of recurrent strokes, showing that secondary prevention doesn't seem to be working.

The study also found that strokes in Maori and Pacific people are occurring more frequently and at a younger age – on average up to 10 to 15 years earlier than NZ Europeans.

Ms Carter says these groups tend to develop their cardiovascular risk profiles earlier than NZ Europeans. This includes diabetes, hypertension and obesity, which can all lead to earlier risk of stroke as well.

"These divergent trends and ongoing ethnic disparities in stroke call for urgent development and the implementation of prevention strategies for different ethnic groups in New Zealand," Ms Carter says.

Positive changes found in the study, such as a decline in smoking amongst the population, were offset by increasing rates of diabetes and obesity in all ethnic groups.

The information gained from the research will be used to reevaluate relevant parts of New Zealand's health strategy for Maori and Pacific peoples.

Ms Carter says stroke is a disease that is often overlooked by a lot of health strategies and now that they have identified these disparities in stroke rates, they can better target diabetes and obesity programmes more towards Maori and Pacific Islanders.

The data also showed NZ Europeans suffered less severe strokes than other local ethnic groups. This may indicate the differences in access to treatment or managing the illness for different groups.

The study has drawn similar conclusions to related studies in the United States and the United Kingdom, which showed disparities between African-Americans and Caucasians.

This research is funded by the Health Research Council of New Zealand and was facilitated by the George Institute for International Health in collaboration with the University of Auckland, as part of the Auckland Regional Community Stroke (ARCOS) Study Group.

HRC57 2007
Level 3, 110 Stanley Street, Auckland PO Box 5541,
Wellesley Street, Auckland, NZ
Telephone 64 9 303 5200 Facsimile 64 9 377 9988
Website www.hrc.govt.nz



Ms Kristie Carter

Key facts:

- stroke affects around 17 million people globally
- stroke is the third leading cause of death in New Zealand and a major cause of disability
- about 18,000 people are living with the effects of stroke in New Zealand and this number is predicted to double by 2020.

Aims of our research are:

- determining trends in the incidence and early case fatality of stroke over 20 years in Auckland.

What our research has shown:

- the rate of stroke among Maori and Pacific Islanders has doubled over the last 20 years
- stroke risk factors such as smoking have decreased, while diabetes and obesity have increased
- Maori and Pacific groups tend to develop their cardiovascular risk profiles earlier than New Zealand Europeans.