Māori Health Review

Making Education Easy

From Issue 19:5 - 2009

Trends in head injury incidence in **New Zealand: a hospital-based study** from 1997/1998 to 2003/2004

Authors: Barker-Collo SL et al

Summary: Data from a national health database were analysed to determine the incidence of traumatic brain injury (TBI)-related hospital discharges (including 1-day stays) to New Zealand Hospitals from 1997/1998 to 2003/2004. Crude annual hospital-based incidence rates for the total population ranged from 226.9 per 100,000 in 1998/1999 to 349.2 in 2002/2003. Incidence rates increased markedly with the change from ICD-9 to ICD-10 diagnostic codes and disparities were observed for ethnicity, age and gender. Crude annual hospital-based incidence rates for males and females in Māori (689/100,000 and 302.8/100,000 person-years) and Pacific Island populations (582.6/100,000 and 217.6/100,000 person-years) exceeded those for the remaining population (435.4/100,000 and 200.9/100,000 person-years), particularly for males. The overall age-standardised hospital-based incidence rate for 2003/2004 was 342 per 100,000 per year, and 458 per 100,000 per year for Māori, with Māori males experiencing a peak in incidence between 30 and 34 years of age that was not apparent for the wider population.

Comment: Another issue close to my research heart, TBI is considered a 'silent epidemic' in NZ because it is under-reported, not well diagnosed and poorly managed. I suggest this is even more so for Māori. The complications for TBI are wide reaching and include learning problems (particularly important for children), mental health issues including drug/alcohol dependence and major impacts on whānau ora/wellbeing as it is often whānau trying to manage with little/no support. ACC and hospital figures show that despite the higher incidence for TBI amongst Māori, they are less likely to receive rehabilitation. And so we must 'attack' this problem at different fronts:

- 1. ensure accurate diagnosis of TBI in Māori
- 2. investigate reasons for increased TBI rates in Māori and particularly males aged 30–34 years
- 3. reduce TBI in Māori with targeted injury prevention
- 4. ensure Māori with TBI receive quality care including support/education for whānau.

Reference: Neuroepidemiology. 2009;32(1):32-9.

http://content.karger.com/ProdukteDB/produkte.asp?doi=10.1159/000170090

Independent commentary by **Dr Matire Harwood**

Dr Matire Harwood (Ngapuhi) has worked in Hauora Māori, primary health and rehabilitation settings as clinician and researcher since graduating from Auckland Medical School in 1994. She also holds positions on a number of boards, committees and advisory groups including the Health Research Council. Matire lives in Auckland with her whānau including partner Haunui and two young children Te Rangiura and Waimarie.

Research Review publications are intended for New Zealand health professionals.

Disclaimer: This publication is not intended as a replacement for regular medical education but to assist in the process. The reviews are a summarised interpretation of the published study and reflect the opinion of the writer rather than those of the research group or scientific journal. It is suggested readers review the full trial data before forming a final conclusion on

