

Māori Health Review

Making Education Easy

Issue 16 – 2008

In this issue:

- *Ethnic disparities in edentulism and tooth loss in NZ*
- *Māori experience of cancer*
- *Mortality risk and paediatric febrile seizures*
- *Information on melanoma registrations in NZ*
- *Diabetes risk score may predict type 2 diabetes*
- *Smoke-free legislation and hospitalisations for ACS*
- *Home warmth and COPD patients*
- *Geographical inequalities in cause-specific mortality*
- *Intensive glucose lowering in type 2 diabetes*
- *Follow-up after BP control in type 2 diabetes*

Tēnā koutou, tēnā koutou, tēnā tātou katoa

E nga mana, e nga reo, e nga tangata katoa, he mihi mahana ki a koutou katoa. Naumai, haere mai ki te Tirohanga Hou Rangahau Hauora Māori. Nga moemiti maha mo o koutou urupare, o koutou whakaaro, o koutou tohutohu a tautoko hoki. No reira tonoa mai ano o koutou korero, a riipoata rangahau ki a whiriwhirihia mo nga tukunga, e heke mai nei.

Greetings

Warm greetings to you all and welcome to Māori Health Review. We appreciate your feedback, thoughts, advice and support. I also wish to encourage people to send through research or journal articles to be considered for future issues.

Noho ora mai

Matire

Dr Matire Harwood

matire@maorihealthreview.co.nz

Disparities in edentulism and tooth loss between Māori and non-Māori New Zealand women

Authors: Lawton B et al

Summary: These researchers investigated the dentate status of Māori and non-Māori NZ women with regard to tooth loss, edentulism and denture-wearing; ethnic and sociodemographic disparities were also examined within the sample of 1817 women who were screened for participation in a randomised controlled trial. 164 (9%) women were edentulous and 540 (30.3%) wore a denture (partial or complete). The mean number of teeth present was 24.2, and older women had fewer teeth on average. Socio-demographic and ethnic disparities in tooth loss and edentulism were observed. Māori ethnicity was strongly associated with edentulism and tooth loss, with Māori women nearly six times more likely than NZ European women to be edentulous (odds ratio 5.8). These associations held after controlling for confounding factors of age, education, smoking, diabetes, cardiovascular disease history, and BMI.

Comment: Tooth loss and edentulism are important negative health outcomes and are associated with poor nutrition, chronic infection, avoidable hospitalisation and pain. The fact that rates were five times higher for Māori than NZ European women in this sample is alarming, particularly given that the disparity persisted after controlling for various factors (although NZDep levels were not reported). Some Māori health providers have identified *oranga niho* as a health priority and offer subsidised access to local/mobile dental services for their clients. It may be worthwhile contacting such providers or Te Ao Marama, the Māori Dental Association, for advice or further information if thinking about a dental service in your region. Please email if you'd like contact details.

Reference: *Aust N Z J Public Health*. 2008;32:254-60

<http://www3.interscience.wiley.com/journal/120091626/abstract>

➤ COMING SOON

Sexual Health Research Review Eye Health Research Review

To update your Research Review subscriptions log on to the Member's Area at www.researchreview.co.nz

The road we travel: Māori experience of cancer

Authors: Walker T et al

Summary: This qualitative study examined the experiences of 44 Māori cancer patients, survivors, and their whānau, in order to shed light on the causes of cancer inequalities for Māori. Participants' views were collected in five hui (focus groups) and eight interviews in the Horowhenua, Manawatu, and Tairāwhiti districts of New Zealand. Participants identified examples of cancer services that work for Māori, such as Māori health providers. They also identified positive and negative experiences with health professionals. The involvement of whānau in the cancer journey was viewed as highly significant as was a holistic approach to care. Suggested improvements to cancer services included better resourcing of Māori providers, cultural competence training for all health workers, the use of systems 'navigators', and the inclusion of whānau in the cancer control continuum.

Comment: Robust qualitative research, the themes validated in focus groups, which will hopefully inform cancer services throughout NZ. The editorial from Mr Jonathan Koea (nō Taranaki, a hepatobiliary surgeon in Auckland) provides the context in which cancer care is currently delivered in NZ. As he concludes, addressing the issues that were identified in this study will, in all likelihood, improve health care delivery which will benefit all.

Reference: *N Z Med J.* 2008;121(1279):27-35
<http://tinyurl.com/4n7uqn>

*Independent commentary
by Dr Matire Harwood,
Medical Research Institute
of New Zealand*

Death in children with febrile seizures: a population-based cohort study

Authors: Vestergaard M et al

Summary: 1,675,643 children born in Denmark between January 1, 1977, and December 31, 2004, were identified by linking registers for civil service, health, and cause of death, and followed-up from 3 months of age until death, emigration, or August 31, 2005. Of a total of 8172 deaths, 232 occurred in 55,215 children who had a history of febrile seizures. The mortality rate ratio was 80% higher during the first year after a first febrile seizure and 90% higher during the second year after the seizure but, thereafter, was close to that seen for the general population. There were 132 deaths per 100,000 children within 2 years of a febrile seizure versus 67 deaths per 100,000 in those without a history of febrile seizure. In a nested case-control study within the cohort, information retrieved from medical records on febrile seizures and neurological abnormalities in the 8172 children who died and 40,860 individually matched control subjects revealed that children with simple (≤ 15 min and no recurrence within 24 h) febrile seizure had a mortality rate similar to that of the general population, whereas mortality was increased for those with complex seizures.

Comment: As the authors state, there is no increased risk for death after a single episode of febrile seizure which has lasted less than 15 minutes. For parents with children who have had more than 1 febrile seizure within 24 hours, or when the seizure has lasted longer than 15 minutes, health providers should offer support and education on the management of fever and consider appropriate investigation for underlying neurological conditions.

Reference: *Lancet.* 2008;372:457-63

<http://www.thelancet.com/journals/lancet/article/PIIS0140673608611988/abstract>

The incidence and thickness of cutaneous malignant melanoma in New Zealand 1994–2004

Authors: Richardson A et al

Summary: New Zealand Health Information Service data were examined for all registrations concerning cutaneous malignant melanoma ($n=19,435$) from 1994–2004. The incidence of thick melanoma did not decrease during 1994–2004. Significant associations were found between age, gender, ethnic group, type of melanoma, and the thickness of melanoma at diagnosis. Of those diagnosed with melanoma, the proportion with thick melanoma (>3.0 mm) was greater for older than younger people, for males compared with females, for Māori compared with non-Māori (despite the lower incidence in Māori), and for those diagnosed with nodular melanoma compared with other types of melanoma.

Comment: Tumour thickness is the most significant prognostic factor for survival of patients with localised cutaneous melanoma. Despite low numbers, Māori with melanoma appear to be at risk for having a thick melanoma and possibly poor prognosis. Strategies to reduce the risk of melanoma, to reduce progression to thick melanoma and to improve detection and treatment of thick melanomas must include Māori.

Reference: *N Z Med J.* 2008;121(1279):18-26

<http://www.nzma.org.nz/journal/abstract.php?id=3189>

Order the latest Māori Workforce Research

Anyone wanting a copy of

RAURINGA RAUPA

RECRUITMENT AND RETENTION OF MĀORI IN THE HEALTH AND DISABILITY WORKFORCE

visit the AUT University website link:

http://www.aut.ac.nz/research/research_institutes/niphmhr/taupua_waiora_centre_for_maori_health_research/publications.htm

He Rito Harakeke and He Tipu Harakeke Booklets

The Ministry of Health has summarised the Rauringa Raupa research into two short booklets -

He Rito Harakeke: Retention of Māori in the Health and Disability Workforce and **He Tipu Harakeke: Recruitment of Māori in the Health and Disability Workforce**. Visit www.maorihealth.govt.nz or you can order hard copies from Wickliffe 0800 226 440 (helpdesk number) quoting HP4569 and HP4573. **He Pa Harakeke: Māori Health Workforce Profile** data is also available online or hardcopy via helpdesk quote number HP4399.

A simple risk score identifies individuals at high risk of developing type 2 diabetes: a prospective cohort study

Authors: Rahman M et al

Summary: A risk score based on non-biochemical parameters was evaluated for its accuracy in identifying individuals at risk of developing type 2 diabetes, using a population-based prospective cohort (European Prospective Investigation of Cancer-Norfolk) of 25,639 participants aged 40–79 years recruited from UK general practices who attended a health check between 1993 and 1998. The Cambridge Diabetes Risk Score was computed for 24,495 individuals with baseline data on age, sex, prescription of steroids and antihypertensive medication, family history of diabetes, body mass index and smoking status. At a mean 5-year follow-up, there were 323 new cases of diabetes; a cumulative incidence of 2.76/1000 person-years. Those in the top quintile of risk were 22 times more likely to develop diabetes than those in the bottom quintile. In all, 54% of all clinically incident cases occurred in individuals in the top quintile of risk (risk score >0.37). The area under the receiver operating characteristic curve was 74.5%.

Comment: May be useful in regions where there are difficulties accessing OGTTs. I see that screening was initiated at 40 years of age in this study. I would perhaps consider lowering the age at which to commence screening here in Aotearoa. I'm not aware of clear guidelines (like those set for CVD screening at 35 and 40 years of age for Māori men and women respectively, 45 and 50 for NZ European) although I have seen some practices start at age 30 for Māori.

Reference: *Fam Pract.* 2008;25:191-6

<http://fampra.oxfordjournals.org/cgi/content/abstract/25/3/191>

Smoke-free legislation and hospitalizations for acute coronary syndrome

Authors: Pell JP et al

Summary: The number of admissions for acute coronary syndrome (ACS) for the 10-month period preceding enactment of national smoke-free legislation in March 2006 in Scotland was compared with admissions during the 10-month period after enactment, overall and according to smoking status. Overall, the number of admissions for ACS decreased from 3235 to 2684 (by 17%), as compared with a 4% reduction in England (which has no such legislation) during the same period and a mean annual decrease of 3% (maximum decrease, 9%) in Scotland during the decade preceding the study. This reduction could not be attributed to the number of patients who were not hospitalised and who died from ACS; this number decreased by 6%, from 2202 patients during the period 2005 through 2006 to 2080 patients during the period 2006 through 2007. The number of admissions for acute coronary syndrome was reduced by 14% among smokers, by 19% among former smokers, and by 21% among never-smokers. Among never-smokers, self-reported reductions in exposure to smoke were confirmed by a reduction in the geometric mean concentration of serum cotinine from 0.68 to 0.56 ng per mL.

Comment: Further evidence on the health benefits of a smoke-free environment for non-smokers and smokers alike. We've seen already a number of papers from this research team and should expect to see more in years to come as they monitor the long-term health benefits of the smoke-free legislation.

Reference: *N Engl J Med.* 2008;359:482-91

<http://content.nejm.org/cgi/content/abstract/359/5/482>

Home warmth and health status of COPD patients

Authors: Osman LM et al

Summary: This study was conducted in the North East of Scotland during autumn, winter and spring 2004–05 and sought to determine whether health status of 148 patients with chronic obstructive pulmonary disease (COPD) was associated with the number of hours when homes reached recommended Home Energy Efficiency guidelines of indoor warmth (21°C for ≥9 hours/day in living areas). Patients with fewer days with ≥9 hours of warmth at 21°C in the living room had significantly poorer respiratory health status; this was independent of age, lung function, smoking and outdoor temperatures. Patients who were current smokers showed more benefit of indoor warmth on health status than non-smokers.

Comment: Warmer homes can improve the respiratory health status for both smoking and non smoking people with COPD. There are a number of opportunities to ask your clients with COPD about home heating including the acute visit, part of a CarePlus goal setting exercise or during the flu vaccination campaigns (March to September). Many people have complained about the soaring electricity prices this past year and options to support a heated home must be explored. Some examples include WINZ assistance (such as the Disability Allowance) and participation in research (Healthy Homes Projects).

Reference: *Eur J Public Health.* 2008;18:399-405

<http://tinyurl.com/4kppqd>

Privacy Policy: Research Review will record your email details on a secure database and will not release it to anyone without your prior approval. Research Review and you have the right to inspect, update or delete your details at any time.

The views expressed in this Publication are personal to the authors, and do not necessarily represent the views or policy of the Ministry of Health on the issues dealt with in the publication.

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 its merits.

> **NOW AVAILABLE**
Geriatrics Research Review
Psychiatry Research Review

To update your Research Review subscriptions log on to the Member's Area at www.researchreview.co.nz

Check out the new Natural health Info section at

www.naturalhealthreview.org

Keeping you up to date with research on conditions and therapies!

Have geographical inequalities in cause-specific mortality in New Zealand increased during the period 1980–2001?

Authors: Pearce J et al

Summary: This study examined changes in cause-specific mortality rates for males and females between 1980 and 2001, by District Health Boards (DHBs) and evaluated whether geographical inequality in cause-specific mortality increased during this period. While overall mortality rates fell for both males and females between 1980 and 2001, age-standardised rates rose for chronic obstructive pulmonary disease, diabetes mellitus, and cancer. In addition, overall reductions in mortality rates were not uniform across all regions of the country; all-cause mortality rate ratios (RRs) for each DHB ranged from 0.98 to 0.69 for males and from 1.10 to 0.69 for females. RRs for cause-specific mortality varied more widely between DHBs. Relative index of inequality values for all-cause mortality and causes-specific mortality revealed an overall increase in the level of geographical inequalities in health during the study period.

Comment: As recently reported in the media, this study highlights geographical and DHB-level differences in risk of death from specific diseases. For example, the risk of death due to type 2 diabetes was greatest in 3 particular DHBs. The accompanying editorial from Tony Blakely is also worth a read, particularly his comments about any future government needing to include deprivation and ethnicity in the main funding formula for primary care. This was because the primary health organisations could have a high-need population with a 60% higher mortality rate than a low-need population, but only receive up to 17% extra funding.

Reference: *N Z Med J.* 2008;121(1281):15-27

<http://tinyurl.com/3vzmep>

Effects of intensive glucose lowering in type 2 diabetes

Authors: Krumholz HM et al

Summary: This study reports the effects of an intensive therapeutic strategy (targeting a glycated haemoglobin level >6.0%) on mortality and major cardiovascular events in patients with type 2 diabetes who had either established cardiovascular disease or additional cardiovascular risk factors. 10,251 patients with a median glycated haemoglobin level of 8.1% were assigned to receive intensive therapy or standard therapy (targeting a level from 7.0 to 7.9%). Stable median glycated haemoglobin levels of 6.4% and 7.5% were achieved in the intensive-therapy group and the standard-therapy group, respectively, at 1 year and were maintained throughout the 3.5-year follow-up period. Compared with standard therapy, the use of intensive therapy was associated with significantly higher rates of hypoglycaemia, weight gain, and fluid retention. The rate of death from any cause was significantly higher in the intensive-therapy group than in the standard-therapy group, and major cardiovascular events were not significantly reduced with intensive therapy.

Comment: The statement 'first do no harm' came to mind after reading this paper. Standard treatment that targets an HBA1c% between 7 to 7.9 appears safer than intensive therapy (aiming for levels less than 6.0%), with intensive therapy associated with increased risk for death, hypoglycaemic events and weight gain. An important study for primary care, diabetes providers and patients alike.

Reference: *N Engl J Med.* 2008;358:2545-59

<http://content.nejm.org/cgi/content/full/NEJMoa0802743>

Long-term follow-up after tight control of blood pressure in type 2 diabetes

Authors: Holman RR et al

Summary: Outcomes are reported from a 10-year, postinterventional follow-up of the survivor cohort of the UKPDS blood pressure study that examined whether a continued benefit of earlier improved blood pressure control was evident and, if so, the degree to which it persisted. The relative risk reductions seen in the tight blood pressure control group disappeared within 2 years after termination of the trial. In addition, significant relative risk reductions seen during the trial for any diabetes-related endpoint, diabetes-related death, stroke, and microvascular disease in the group receiving tight, as compared with less tight, blood pressure control were not sustained during the post-trial follow-up period. The nonsignificant relative risk reductions observed during the trial for myocardial infarction and death from any cause were also diminished during follow-up, however, there was a significant risk reduction for peripheral vascular disease associated with tight blood pressure control.

Comment: Strong evidence on the benefit of 'tight' (less than 150/85 mmHg treated with up to 50mg bd captopril or 100mg atenolol per day) blood pressure control in the long-term, particularly for people with type 2 diabetes. Often described as an insidious illness (meaning that patients often don't recognise the signs of raised blood pressure until damage has occurred), this study reinforces the need to provide education and support for patients to take their medication.

Reference: *N Engl J Med.* 2008 Sep 10. [Epub ahead of print]

<http://content.nejm.org/cgi/content/full/NEJMoa0806359>

NATURAL REMEDIES THAT REALLY WORK

A NEW ZEALAND GUIDE



What medical research *actually* says
about natural health products and therapies

DR SHAUN HOLT

Subscribing to Māori Health Review

To subscribe or download previous editions of
Māori Health Review publications go to:

www.maorihealthreview.co.nz

To unsubscribe reply to this email with unsubscribe in the subject line.