

Māori Health Review™



Making Education Easy

Issue 40 – 2012

In this issue:

- > *Foot ulcers in Māori with diabetes*
- > *STI prevalence in pregnant Māori*
- > *High rates of chlamydia*
- > *Vitamin D deficiency in psychiatric patients*
- > *Late presentation of uterine cancer*
- > *Incidence of acute rheumatic fever*
- > *Rheumatic heart disease mortality*
- > *Under-diagnosis of gout*
- > *High incidence of spinal cord impairment*
- > *Azithromycin for Māori children with bronchiectasis*
- > *Inequalities in abdominal aortic aneurysm*
- > *Impact of Treaty on health disparities*

Abbreviations used in this issue

DHB = District Health Board
LMC = Lead Maternity Carer
OR = odds ratio
PHO = Primary Health Organisation
STI = sexually transmitted infection

Tēnā koutou katoa

Nau mai ki tenei Tirohanga hou Hauora Māori. He rangahau tuhi hou e paa ana ki nga hau ora a ki te oratanga o te Māori. No reira noho ora mai raa i o koutou waahi noho a waahi mahi hoki. Noho ora mai.

Greetings

Welcome to this issue of the Māori Health Review. Each issue attempts to bring you research relevant to the health and wellbeing of Māori. I welcome feedback and suggestions for papers/research to include in future issues and I'm pleased to hear and read about the excellent work being undertaken in Hauora Māori.

Stay well, regards

Matire

Dr Matire Harwood

matire@maorihealthreview.co.nz

Foot problems in Māori with diabetes

Authors: Ihaka B et al

Summary: Podiatric-specific characteristics were determined in 53 Māori with diabetes recruited from two Māori PHOs. They had a mean disease duration of 12 years, mean HbA1c of 8.3% and displayed risk factors for diabetes-related complications, including hypertension in 49% of participants. Podiatry assessment showed no evidence of microvascular or macrovascular complications, however 53% presented with pre-ulcerative lesions and 8% presented with current pedal ulceration. More than 85% had good foot-care knowledge, but 60% were classified with a foot risk status that required regular podiatric management and screening.

Comment: Although regular podiatry care is recommended to monitor and treat foot ulcers in people with diabetes, it is not currently offered by all DHBs or PHOs. Anecdotally, some providers prefer community podiatry provided by either students (i.e. Schools of Podiatry) or private practitioners. Such programs seem to work well, providing integrated care and having lower 'did not attend' rates compared with a hospital-based service.

Reference: *NZ Med J* 2012;125:1360

<http://journal.nzma.org.nz/journal/abstract.php?id=5303>

Māori Health Review

Independent commentary by Dr Matire Harwood

For full bio [CLICK HERE](#)

Research Review publications are intended for New Zealand health professionals.



Foundation Course in Cultural Competency

The Foundation Course in Cultural Competency on-line training tool is now available.

This training is free for the New Zealand Health Workforce until 30 June 2013.



For further information and registration details, please visit www.mauriora.co.nz

For more information, please go to <http://www.maorihealth.govt.nz>

Screening for sexually transmitted infections in pregnancy at Middlemore Hospital, 2009

Authors: Ekeroma AJ et al

Summary: The screening rate for STIs in 6795 women who had a baby at Middlemore Hospital in 2009 was retrospectively determined. Only 64.3% of these women were screened for an STI during their pregnancy, despite requirements by the Ministry of Health for screening all pregnant women. Swab testing was done by significantly fewer independent maternity providers than DHB-based LMCs (54.0% vs 71.3%; $p < 0.0001$). A higher proportion of Māori and Pacific women were screened compared to other groups and younger women were screened more compared to older women. The STI prevalence rate was high, especially in young Māori and Pacific women. Of all women screened, 8.2% had chlamydia, 2.2% had trichomonas and 0.2% had gonorrhoea. There were higher rates of chlamydia and trichomonas in Māori and Pacific women in comparison to European and Asian women. Prevention and detection of STIs in pregnancy requires education of both women and LMCs.

Reference: *NZ Med J* 2012;125:1359

<http://journal.nzma.org.nz/journal/abstract.php?id=5283>

Access to chlamydia testing needed for high-risk groups: patterns of testing and detection in an urban area of New Zealand

Authors: Rose SB et al

Summary: Rates of chlamydia testing and detection were analysed for an urban region of New Zealand from 1999 to 2005. Females were tested five times more often than males, but had lower rates of chlamydia diagnoses (OR 0.4; 95% CI 0.39 to 0.42). Rates of chlamydia detection were significantly higher in Pacific people (OR 2.33; 95% CI 2.16 to 2.5) and Māori (OR 2.01; 95% CI 1.87 to 2.17) than in Europeans. Individuals living in areas of greater socioeconomic deprivation also had higher rates of chlamydia (OR 1.66; 95% CI 1.55 to 1.77). Chlamydia diagnoses were significantly higher in individuals under 25 years, with the highest positive diagnoses in the 15–19 year age group (OR 9.06; 95% CI 8.23 to 9.98). The authors concluded that appropriate chlamydia control programs are urgently needed in New Zealand, with testing targeted to higher-risk groups who appear to be currently underserved.

Reference: *ANZ J Public Health* 2012;36(4):343-350

<http://onlineibrary.wiley.com/doi/10.1111/j.1753-6405.2012.00880.x/abstract>

Comment: Two studies highlighting issues in the management of STIs in New Zealand. A couple of interesting points made here. The first is that screening for STI during pregnancy is low for women managed by private LMCs; this requires further investigation including perhaps qualitative research with LMCs and primary care providers (often the first point of contact for pregnancy). The second is that women are much more likely to be tested than males. As the authors state, more women may present with symptoms of STI and the important thing is that partners are treated/ followed up. However programs that improve testing/management for young men are also required.

Vitamin D status of psychiatric inpatients in New Zealand's Waikato region

Authors: Menkes DB et al

Summary: Vitamin D deficiency was found to be prevalent in psychiatric inpatients, particularly in Māori and inpatients with schizophrenia in this New Zealand-based study. Vitamin D status was assessed, by measuring 25-hydroxy vitamin D3 levels in venous blood, during late winter in Hamilton in 102 adult psychiatric inpatients. Mild deficiency (<50 nM) was detected in 74% of inpatients and severe deficiency (<25 nM) was detected in 19%. Māori (n=51) were significantly more likely to be deficient for vitamin D than Europeans ($p=0.04$). Inpatients with a diagnosis of schizophrenia were also more likely to have vitamin D deficiency than those with mania or depression ($p < 0.001$). The authors commented that vitamin D deficiency may be relevant to poor physical health outcomes and supported 'proposals to provide vitamin D supplementation, particularly during the winter months.'

Comment: Further evidence on the health effects of Vitamin D deficiency for Māori. Studies investigating its impact on cardiovascular and respiratory disease are also underway.

Reference: *BMC Psychiatry* 2012;12:68

<http://www.biomedcentral.com/1471-244X/12/68>

Ethnic differences in disease presentation of uterine cancer in New Zealand women

Authors: Firestone RT et al

Summary: This retrospective survey examined 3203 cases of uterine cancer registered with the New Zealand Cancer Registry between 1997 and 2006. The incidence of uterine cancer in Māori women was 17.7 per 100,000 women and the mortality rate was 7.4 per 100,000 women. Women in the most deprived areas were more likely to present with an advanced stage of uterine cancer (OR 1.64; 95% CI 1.09 to 2.48). Māori women were less likely to present with well-differentiated tumours (OR 0.69; 95% CI 0.52 to 0.92).

Comment: Uterine cancer is an important health issue for Māori women given its frequency in the 45- to 64-year-old age group (where it is the third most common cancer after breast and lung), and the disparities in incidence and mortality rates between Māori and non Māori. As the authors conclude, the results raise questions about access to diagnostic services for these groups of women.

Reference: *J Fam Plann Reprod Health Care* 2012; Jan 12 [Epub ahead of print]

<http://jfprhc.bmj.com/content/early/2012/01/12/jfprhc-2011-100113.short>

Privacy Policy: Research Review will record your email details on a secure database and will not release them 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.

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 within the publication.

Need guidance on developing effective health education resources?

Rauemi Atawhai

A guide to developing health education resources in New Zealand

is now available on the Ministry of Health website (www.health.govt.nz).

The guide outlines the core stages for developing useful health resources and touches on health literacy, consumer input and other matters to consider in the process.

Rauemi Atawhai

A guide to developing health education resources in New Zealand

Incidence of acute rheumatic fever in New Zealand children and youth

Authors: Milne RJ et al

Summary: The incidence of acute rheumatic fever was found to be high in disadvantaged North Island communities, with high concentrations of Māori or Pacific families, in an analysis of New Zealand national hospital admissions between 1993 and 2009. Incidence rates for all children aged 5-14 years were 17.2 per 100,000 (95% CI 16.1 to 18.3). When stratified for ethnicity, incidence rates were 40.2 per 100,000 (95% CI 36.8 to 43.8) for Māori, 81.2 per 100,000 (95% CI 73.4 to 89.6) for Pacific, and 2.1 per 100,000 (95% CI 1.6 to 2.6) for non-Māori/Pacific. Between 1993 and 2009, incidence rates increased by 79% in Māori and 73% in Pacific youth, while rates in other ethnicities decreased by 71%. During 2000-2009, Māori and Pacific children comprised 30% of children aged 5-14 years, but accounted for 95% of new cases of acute rheumatic fever. Most cases (<90%) were in the highest five deciles of socioeconomic deprivation and 70% were in the most deprived quintile. Similarly, most cases (94%) occurred in one of ten DHBs, which together comprised 76% of children aged 5-14 years in New Zealand. The risk of a child living in the most deprived decile being admitted to the hospital for acute rheumatic fever by 15 years of age was one in 150.

Reference: *J Paediatr Child Health* 2012;48(8):685-691

<http://onlinelibrary.wiley.com/doi/10.1111/j.1440-1754.2012.02447.x/abstract>

Mortality and hospitalisation costs of rheumatic fever and rheumatic heart disease in New Zealand

Authors: Milne RJ et al

Summary: Annual mortality and hospital admission costs for acute rheumatic fever and rheumatic heart disease were estimated from hospital admissions in 2000-2009 and deaths in 2000-2007. The mean annual mortality rate was 4.4 per 100,000 (95% CI 4.2 to 4.7) based on an average of 159 deaths from rheumatic heart disease each year. Māori and Pacific mortality rates were 5- to 10-fold higher than for non-Māori/Pacific people. They also died from rheumatic heart disease at a much younger age: mean age at death (male/female) was 56.4/58.4 years for Māori; 50.9/59.8 years for Pacific; and 78.2/80.6 years for non-Māori/non-Pacific men and women. Hospital admissions for rheumatic fever or rheumatic heart disease were estimated to cost \$12 million per year (based on 2009/2010 national pricing). Heart valve surgery accounted for 28% of admissions and 71% of the cost. For children 5-14 years of age, valve surgery accounted for 7% of admissions and 27% of the cost. Notably, two-thirds of the cost occurred after the age of 30 years.

Reference: *J Paediatr Child Health* 2012;48(8):692-697

<http://onlinelibrary.wiley.com/doi/10.1111/j.1440-1754.2012.02446.x/abstract>

Comment: Frightening! Rates increased by over 70% for Māori and Pacific children from 1993 to 2009, yet declined by 71% for non Māori/Pacific children. And a 22-year difference in mean age at death from rheumatic heart disease between Māori and non-Māori, non-Pacific people? The significant ethnic disparities in rheumatic heart disease point to systems that permit the different distribution of Māori and non-Māori across deprivation deciles; and that tolerate poor health outcomes for Māori.

Potential unmet need for gout diagnosis and treatment: capture-recapture analysis of a national administrative dataset

Authors: Jackson G et al

Summary: The undercount of adults aged ≥20 years diagnosed with gout in New Zealand was estimated using capture-recapture analysis of administrative data sets. The crude prevalence of diagnosed gout in 2009 was 3.75% based on hospitalisation and drug dispensing claims for allopurinol or colchicines. The covariate-adjusted capture-recapture estimate of those not recorded but likely to have gout was 0.92%, giving an overall estimated prevalence of gout of 4.67% (95% CI 4.49 to 4.90%). The undercount of gout diagnoses is therefore about 20% and represents 'an aspect of unmet need in the population.' After capture-recapture, gout prevalence for all males aged ≥20 years was 7.3% compared with a prevalence of >30% in Māori and Pacific men ≥65 years. The authors concluded that undiagnosed patients need to be identified and treated specifically for gout.

Comment: Two key messages here – firstly that the prevalence of gout is high in Aotearora and in Māori. Secondly, that of all people with gout, 20% have not been formally diagnosed or received best-practice care. Capture-recapture may not be practical for all; and other methods to identify people with gout should be considered. Examples include working with local pharmacies to refer people seeking over-the-counter treatments or screening questionnaires in at-risk populations.

Reference: *Rheumatology* 2012;51(10):1820-1824

<http://rheumatology.oxfordjournals.org/content/51/10/1820>

Traumatic and non-traumatic spinal cord impairment in New Zealand: incidence and characteristics of people admitted to spinal units

Authors: Derrett S et al

Summary: This longitudinal study estimated the incidence of traumatic and non-traumatic spinal cord neurological impairment in New Zealand. Incidence rates were based on people admitted to New Zealand's two spinal units from mid-2007 to mid-2009. Māori had a higher incidence of spinal cord impairment (46 per million; 95% CI 30 to 64 million) than Europeans (29 per million; 95% CI 24 to 34 million). Most patients reported considerable symptomatic, general health and disability burden in interviews undertaken 6.5 months after spinal cord impairment.

Comment: Spinal cord impairment is an important health issue for Māori given the high incidence rates, significant long-term effects on quality of life and wider impacts on whānau/caregivers and communities. Further research to identify types of injuries would inform injury prevention strategies; audits against best practice could help providers identify ways in which to reduce the burden of complications.

Reference: *Inj Prev* 2012; Apr 29 [Epub ahead of print]

<http://injuryprevention.bmj.com/content/early/2012/04/28/injuryprev-2011-040266.abstract>

Subscribing to Māori Health Review

To subscribe or download previous editions of Research Review publications go to www.maorihealthreview.co.nz

Māori Health Review and Ministry Publications

An **A to Z guide** is now available on the Māori Health website: www.maorihealth.govt.nz

The **A to Z guide** is a tool designed to help you locate research literature on Māori health topics.

What are the benefits of using the A to Z guide? The A to Z guide will provide you with direct access to over 300 articles on specific Māori health topics featured in Māori Health Review and other Ministry publications.

To access the A to Z guide go to: Publications on the Māori health website www.maorihealth.govt.nz

A-Z GUIDE

Azithromycin for indigenous children with bronchiectasis: study protocol for a multi-centre randomized controlled trial

Authors: Valery PC et al

Summary: A multicentre, randomised, double-blind, placebo-controlled clinical trial is being undertaken in Australia and New Zealand to investigate the efficacy of azithromycin in reducing the rate of pulmonary exacerbations in indigenous children with bronchiectasis. The trial is including Aboriginal, Torres Strait Island, Māori and Pacific children aged 1 to 8 years who have had ≥ 1 pulmonary exacerbation in the last 12 months. They will be randomised to receive azithromycin 30 mg/kg once a week or placebo for 12-24 months. Should the trial demonstrate efficacy of azithromycin in reducing pulmonary exacerbations, 'it will provide a much-needed rationale for the use of long-term antibiotics in the medical management of bronchiectasis in indigenous children.'

Comment: I've included this study to raise awareness about a clinical study being undertaken exclusively with indigenous peoples. Not all clinical studies with indigenous peoples will benefit participants, as this study has the potential to. People considering participation in research should be encouraged to weigh the risk of being 'researched' against the benefit of contributing to knowledge and best practice.

Reference: *BMC Pediatrics* 2012;12:122

<http://www.biomedcentral.com/1471-2431/12/122/abstract>

Ethnic inequalities in incidence, survival and mortality from abdominal aortic aneurysm in New Zealand

Authors: Sandiford P et al

Summary: This retrospective analysis quantified ethnic differences in incidence, survival and mortality from abdominal aortic aneurysm in New Zealand from 1996 to 2007. Māori were 8.3 years younger at first admission than European/other ethnicities (non-Māori, non-Pacific, non-Asian). Mortality rates were higher in Māori with a relative risk of 1.30 (95% CI 1.06 to 1.60) for men and 2.66 (95% CI 2.13 to 3.31) for women. One-year cumulative relative survival was significantly lower in Māori than European/other ethnicities for both men (60% vs 73%; $p < 0.0001$) and women (56% vs 67%; $p < 0.0001$). Māori were also much less likely to have their aneurysm repaired electively (39.6% vs 61.1%; $p < 0.00001$). The authors concluded that these ethnic inequalities provide 'additional support for screening on equity grounds.'

Comment: Ultrasound screening for abdominal aortic aneurysm has been shown to be effective at reducing mortality in randomised controlled trials; as a result some countries already offer population-based (i.e. male) screening programs. The higher incidence and mortality rates in Māori add an equity dimension to the development of a screening program in Aotearoa. However, further work is required to ensure adequate recruitment into such a program and to improve surgical outcomes for Māori women.

Reference: *J Epidemiol Community Health* 2012; Jul 5 [Epub ahead of print]

<http://jech.bmj.com/content/early/2012/07/04/jech-2011-200754.abstract>

Indigenous health: New Zealand experience

Authors: Durie MH

Summary: This commentary discusses how New Zealand's commitment to the Treaty of Waitangi impacts health policies and addresses ethnic health disparities.

Comment: Sir Professor Mason Durie provides a piece on the Māori experience in this issue of the Medical Journal of Australia, which is dedicated to indigenous health research for Australian Aboriginal and Torres Strait Island peoples. I thought this may be of interest to many readers.

Reference: *Med J Aust* 2012;197(1):10-11

<https://www.mja.com.au/journal/2012/197/1/indigenous-health-new-zealand-experience>

[CLICK HERE](#)

to read previous issues of
Māori Health Review

How many of
your patients
smoke?

65% of smokers want
help to quit. NRT and some
brief advice can more than
double their chances.



ASK ABOUT THE
ELEPHANT

It's as simple as **ABC** ...

Ask whether a patient smokes

Give **B**rief advice to quit

Offer evidence-based **C**essation support

Learn more about how to help
your patients quit

There's an e-learning tool for
health care professionals at
www.smokingcessationabc.org.nz