Māori Health Review

Making Education Easy

In this issue:

- Food pricing policies may improve population diets
- How racism affects the health of Māori
- Medicine access varies by ethnicity in NZ
- Māori nurses' attitudes to smoking cessation
- Ethnic differences in
 H. pylori eradication rates
- Diabetic retinopathy and maculopathy in Northland
- Acute post-streptococcal glomerulonephritis in children
- Injury mortality and morbidity rates of NZ children
- SLE and lupus more common in Māori
- Ideological legitimation of inequality

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. Ngā mihi o te wā me te Tau Hou ki a koutou katoa. 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. Nga mihi

Matire

Dr Matire Harwood matire@maorihealthreview.co.nz

Food prices and consumer demand: differences across income levels and ethnic groups

Authors: Ni Mhurchu C et al.

Summary: This New Zealand study estimated the effects of price changes on consumer demand for major commonly consumed food groups, by income and ethnicity, using food expenditure data from national household economic surveys in 2007/08 and 2009/10 and Food Price Index data from 2007 and 2010. According to the study's calculations, targeted food pricing policies have the potential to alter the diets and nutritional health of low-income and priority ethnic groups, such as Māori, to a greater extent compared with those of high-income and majority ethnic groups.

Comment: Although I found the terminology in the article a little difficult to follow, the authors provide practical solutions. For example, the fact that low-income households and Māori are more sensitive to price changes could be translated into 'a 10% subsidy on vegetables leading to a 6% increase in consumption by the [more wealthy], but an even greater 11% increase in consumption among the lowest income households'.

Reference: PLoS One 2013;8(10):e75934 Abstract

SUBSCRIBING TO MAORI HEALTH REVIEW To subscribe or download previous editions of Research Review publications go to www.maorihealthreview.co.nz

Hapū Ora: Wellbeing in the early stages of life

The research report *Hapū Ora: Wellbeing in the early stages of life* draws on life course, epigenetic and social determinants approaches, along with Māori concepts of pregnancy and wellbeing, to identify key priorities for future Māori maternal health research.

This report is available from the Massey University website: http://www.massey.ac.nz/massey/learning/departments/centres-research/shore/projects/hapu-ora.cfm



For more information, please go to $\underline{http://www.maorihealth.govt.nz}$

www.maorihealthreview.co.nz



The relationship between socially-assigned ethnicity, health and experience of racial discrimination for Māori: analysis of the 2006/07 New Zealand Health Survey

Authors: Harris RB et al.

Summary: This study examined the association between socially-assigned ethnicity (how an individual is classified by others ethnically/racially) and individual experience of racial discrimination, and socially-assigned ethnicity and health (self-rated health, psychological distress [Kessler 10-item scale]) in this analysis of data from 3160 adult participants (aged ≥15 years) in the 2006/07 New Zealand Health Survey who self-identified their ethnicity as Māori. Those who were socially-assigned as European-only had significantly less experience of racial discrimination (adjusted odds ratio [OR] 0.58, 95% Cl 0.44 to 0.78) than Māori who were socially-assigned as non-European. Being socially-assigned as European-only was also associated with health advantage compared to being socially-assigned non-European: more likely to respond with self-rated very good/excellent health (age, sex adjusted OR 1.39; 95% Cl 1.10 to 1.74), and lower Kessler 10 scores (age, sex-adjusted mean difference -0.66, 95% Cl =-1.22 to -0.10). These results were attenuated following adjustment for socioeconomic measures and experience of racial discrimination.

Comment: As the authors say, the findings here are consistent with work in the US; demonstrating the effects of racism on health for Māori, not only in terms of disadvantage, but also the advantages of 'whiteness' in a race conscious society'.

Reference: BMC Public Health 2013;13:844 Abstract

Māori Health Review



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.

Variation in the use of medicines by ethnicity during 2006/07 in New Zealand: a preliminary analysis

Authors: Metcalfe S et al.

Summary: These researchers sought to determine differential dispensing of medicines by ethnicity in New Zealand, using anonymised prescription medicines dispensing claims data from the financial year 1 July 2006 to 30 June 2007. In needs-adjusted analyses, prescription dispensing (script) rates overall for Māori were similar to those of non-Māori in a small number of areas that included substance use disorders, hepatitis B/C treatments and anti-rheumatoid agents. However, the data suggest important and potentially remediable differences that need to be addressed. Differences in dispensing included areas of high health need such as heart disease, infections, diabetes, mental health and respiratory disease, where dispensing was 19–37% lower overall for Māori than for non-Māori, with a net difference of nearly 1 million scripts. Importantly, Māori were both less likely to access medicines, and then after first dispensing had fewer subsequent scripts.

Comment: I think this research is just so useful as it highlights inequities along the 'prescribing \rightarrow taking medication' pathway, the first and major issue beginning with 'us' (non!) prescribers.

Reference: N Z Med J 2013;126(1384):14-41 Abstract

Māori nurses and smoking: what do we know?

Authors: Gifford H et al.

Summary: Outcomes are reported from an analysis of a national webbased survey that explored the smoking behaviours and attitudes to smoking cessation held by 410 Māori registered and student nurses, as well as other health workers. The overall prevalence rate for smoking was 21.5% - 32% for Māori nursing students and 20% for Māori nurses. Among smokers, 75% of nurses smoke <10 cigarettes per day, 84% smoked outside their homes, and almost 20% indicated they were considering quitting within the next month. The majority who had attempted to, or had, quit did not use the range of smoking cessation interventions available. Māori nurses see the value in smoking cessation for improving their own and other's health, although many did not necessarily see themselves as effective in supporting Māori with smoking prevention and cessation.

Comment: I found the information that 'many didn't see themselves as effective with smoking prevention and cessation' interesting and something I'll need to consider in my teaching practice.

Reference: N Z Med J 2013;126(1384):53-63 Abstract

New Zealand Health Survey recent reports

The New Zealand Health Survey (NZHS) provides a wealth of information about the health and wellbeing of New Zealanders. Recent releases include reports about emergency department use at public hospitals and a report about New Zealanders' experiences with health care services.



Emergency Department Use 2011/12 is available at: <u>http://www.health.govt.nz/publication/emergency-department-use-2011-12</u> *Patient Experience 2011/12* is available at: <u>http://www.health.govt.nz/publication/patient-experience-2011-12</u>

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

www.maorihealthreview.co.nz

a RESEARCH REVIEW publication



Increasing primary antibiotic resistance and ethnic differences in eradication rates of *Helicobacter pylori* infection in New Zealand – a new look at an old enemy

Authors: Hsiang J et al.

Summary: This study recruited 593 patients undergoing gastroscopy between February 2012 and October 2012 and determined the prevalence of primary *Helicobacter pylori* (*H. pylori*) infection from all *Campylobacter*-like organism (CLO) tests performed. All patients were attending the Counties Manukau District Health Board (South Auckland) Endoscopy Service. The prevalence of *H. pylori* infection by ethnic group was 7.7% in Europeans, 34.8% in Māori, 31.3% in Pacific peoples and 23.8% in Orientals. Almost half (49.3%) of all isolates were metronidazole-resistant, 16.4% were clarithromycin-resistant and 9.5% were moxifloxacin-resistant. No isolates were resistant to tetracycline. Clarithromycin resistance (≥15%) was prevalent among Māori, Pacific peoples and Orientals. Significant increases were observed in metronidazole resistance from 32.7% in 1999 to 49.3% in 2012 (p=0.011) and clarithromycin resistance from 7% in 1999 to 16.4% in 2012 (p=0.021). In an intent-to-treat analysis, the eradication rate with standard omeprazole, amoxicillin and clarithromycin therapy was 85.7% in ethnic groups where clarithromycin resistance was <15% versus 64.9% in groups where clarithromycin resistance was ≥15% (p=0.024).

Comment: A good piece of research that attempts to better understand and manage ethnic differences in *H. pylori* infection. A revision of the guidelines is required to ensure that Māori receive the best first-line treatment regimen.

Reference: N Z Med J 2013;126(1384):64-76 Abstract

Prevalence of diabetic retinopathy and maculopathy in Northland, New Zealand: 2011–2012

Authors: Papali'i-Curtin AT et al.

Summary: This article reports rates of diabetic retinopathy and maculopathy detected by the Northland Diabetic Retinopathy Screening Programme. Data were analysed from 7098 screenings from 5647 diabetics, representing approximately 77% of the total number of diagnosed diabetics in Northland. The two main ethnic study groups were NZ European (56.5%) and Māori (39.3%). Retinopathy was present in 19% of the overall population: minimal non-proliferative diabetic retinopathy (NPDR) was diagnosed in 13.6%, NPDR in 5.4% and proliferative diabetic retinopathy (PDR) in 0.4%. Of the NPDR cohort, 57% were Māori and 38% were European, while in the PDR cohort, 50% were Māori and 45% were European. Maculopathy was present in 11%. Maculopathy requiring treatment was present in 1.4% (Māori 48%, European 44%). The mean failure-to-attend rate was 31%.

Comment: As they point out in the paper, there are many successful screening programmes in rural and Māori communities (i.e., breast screening in Northland is said to reach more than 90% of eligible women); perhaps retinal screening could learn from, if not tag onto, these.

Reference: N Z Med J 2013;126(1383):20-8 Abstract

Prospective population-based study on the burden of disease from poststreptococcal glomerulonephritis of hospitalised children in New Zealand: epidemiology, clinical features and complications

Authors: Wong W et al.

Summary: Results are reported from this nationwide 24-month study conducted between 2007 and 2009 by the New Zealand Paediatric Surveillance Unit in order to define epidemiology and clinical features of acute post-streptococcal glomerulonephritis (APSGN) in children aged 0-14 years hospitalised with the illness. The study involved 215 paediatricians who reported 176 new hospitalised cases fulfilling a case definition of definite (haematuria with low C3 and high streptococcal titres or biopsy-proven APSGN; n=138) or probable (haematuria with low C3 or high streptococcal titres; n=38). Of all cases, 63% were residing in the Auckland metropolitan region and 67% were in the most deprived quintile. The annual incidence was 9.7/100,000 and overrepresented by Pacific and Maori children (45.5 and 15.7) compared with 2.6/100,000 European/other and 2.1/100,000 Asian. The highest annual incidence was recorded in the South Auckland Metropolitan region (31/100000), versus 14.9 in Central Auckland, 5.9 in the West/North Auckland metropolitan region and 5.5 for the remainder of New Zealand. The highest age-specific incidence was among children aged 5-9 years (15.1/100,000). Reduced serum complement C3, gross haematuria, hypertension, impairment of renal function and heavy proteinuria were found in 93%, 87%, 72%, 67% and 44% of patients, respectively. Severe hypertension was closely associated with either symptoms of an acute encephalopathy or congestive heart failure.

Comment: Of concern, Māori children showed a significant reduction in admission numbers in Auckland in the 1980-90s; however, rates in Auckland have risen again, and nationally the rate in Māori is six times higher than in European/other children. As the authors point out, other potentially avoidable infectious diseases such as cellulitis, rheumatic fever and respiratory illness are also more frequent among Māori and Pacifica children. This is due to multiple, but potentially reversible, factors (such as poverty, poor education, crowded housing and access to health care).

Reference: J Paediatr Child Health 2013;49(10):850-5 Abstract



to read previous issues of Māori Health Review

Māori Health Review and Ministry Publications

A-Z GUIDE

An **A to Z guide** is now available on the Māori Health website: <u>www.maorihealth.govt.nz</u> 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 Maori health topics featured in Maori 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 RESEARCH REVIEW publication



Preventing child unintentional injury deaths: prioritising the response to the New Zealand Child and Adolescent Injury Report Card

Authors: Shepherd M et al.

Summary: These researchers calculated and ranked unintentional child injury death rates based on external cause of injury, with the aim of developing recommendations for child unintentional injury prevention. NZ's score for each of the 12 domains (based on external causes of injury) from the New Zealand Child and Adolescent Report Card was compared to scoring from 25 European countries. Death as a motor vehicle occupant accounts for 49% of all child unintentional injury deaths, followed by pedestrian (10%) and drowning deaths (8%). According to the overall score of the NZ Report Card, NZ ranks as 15th among the participating European countries. NZ is yet to implement important policy and legislative actions.

Comment: I've included this paper to highlight how poorly NZ does in terms of preventing tamariki from sustaining serious and fatal injuries, especially as passengers/pedestrians. It also provides actions that we can take in our rohe, kura and homes.

Reference: Aust N Z J Public Health 2013;37(5):470-4 Abstract

The incidence, diagnostic clinical manifestations and severity of juvenile systemic lupus erythematosus in New Zealand Māori and Pacific Island children: the Starship experience (2000–2010)

Authors: Concannon A et al.

Summary: This paper describes the incidence, diagnostic clinical manifestations and severity of juvenile systemic lupus erythematosus (jSLE) in a cohort of New Zealand Māori and Pacific Island children compared to European children. A review of charts for 32 children with jSLE seen by the Starship paediatric rheumatology and/or renal services between January 2000 and November 2010 revealed an annual incidence of 0.52/100,000 per year. The incidence of jSLE was higher among Māori and Pacific (0.67/100,000 per year; p=0.06) and significantly higher among Asian children (1.17/100,000 per year; p=0.01) than among European children (0.31/100,000 per year). At presentation, lupus nephritis was diagnosed significantly more often in Māori and Pacific children compared with European children (80% vs 40%; p=0.09, as was severe (WHO class 4 or 5) renal lesions (60% vs 40%, p=0.43). Similarly, at any time during the study, lupus nephritis (100% vs 40%; p=0.001) and severe (WHO class 4 or 5) renal lesions (73.3% vs 40%; p=0.12) were more frequent among Māori and Pacific compared with European children. In retrospective analyses of British Isles Lupus Assessment Group (BILAG) scores, severe "Category A" disease occurred more often in Māori and Pacific children (56.8% vs 22.7%; p=0.17) and was predominantly renal in nature (73.3% vs 40%; p=0.12).

Comment: Many people ask me if SLE or lupus is more common in Māori. My experience has been 'yes' but we now have the evidence to confirm what we thought.

Reference: Lupus 2013;22(11):1156-61 Abstract

You may also be interested in these resources from **MOH & Workbase** on Health literacy and the prevention and management of skin infections - resources

Perpetuating one's own disadvantage. Intergroup contact enables the ideological legitimation of inequality

Authors: Sengupta NK, Sibley CG

Summary: These University of Auckland researchers describe a process of ideological legitimation of inequality, whereby intergroup contact between the disadvantaged and dominant groups perpetuates political attitudes that are detrimental to the interests of the disadvantaged group. They illustrate their argument with a nationally representative sample of 1008 Māori (a disadvantaged group in NZ). Positive intergroup contact with the dominant group (NZ Europeans) predicted increased opposition to a topical reparative policy (Māori ownership of the foreshore), whereas contact with ingroup members had the opposite effect of increasing support for reparative policy by reducing subscription to meritocratic ideology.

Comment: An interesting piece of research. I understand that it is part of a bigger project looking at methods to improve both social harmony and equity in Aotearoa.

Reference: Pers Soc Psychol Bull 2013;39(11):1391-403 Abstract **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.

Research Review publications are intended for New Zealand health professionals.

How many of your patients smoke?

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



It's as simple as ABC ... Ask whether a patient smokes Give Brief advice to quit Offer evidence-based Cessation 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

newzealand.govt.nz



www.maorihealthreview.co.nz