

Māori Health Review™



Making Education Easy

Issue 37 - 2012

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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. Matire.

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

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Reduction in purchases of sugar-sweetened beverages among low-income Black adolescents after exposure to caloric information

Authors: Bleich SN et al

Summary: This study assessed the effects of different strategies for influencing adolescents' beverage choices in low-income, predominately Black neighbourhoods in Baltimore, Maryland. The intervention randomly posted 1 of 3 signs at the point of purchase with the following caloric information: (1) absolute caloric count, (2) percentage of total recommended daily intake, and (3) physical activity equivalent. Data were collected from 4 neighbourhood stores for 1600 beverage sales to Black adolescents aged 12–18 years, including 400 during a baseline period and 400 for each of the 3 caloric condition interventions. Offering any caloric information at all reduced the likelihood of sugar-sweetened beverage purchases compared with no intervention (OR, 0.56). When examining the 3 caloric conditions separately, there was a significant effect observed only when caloric information was publicised as a physical activity equivalent (OR, 0.51).

Comment: As this study found, people are more likely to choose healthier options when they feel informed. Here in Aotearoa, there are calls for more simplified information on food labels to help people understand and hopefully enable them to make better choices. For example, nutritionists have recommended 'traffic light' signals for fat, sugar and salt levels to replace the detailed tables and data which are currently provided.

Reference: *Am J Public Health. 2012;102(2):329-35.*

<http://ajph.aphapublications.org/doi/abs/10.2105/AJPH.2011.300350>

THE HEALTH OF MĀORI CHILDREN AND YOUNG PEOPLE WITH CHRONIC CONDITIONS AND DISABILITIES IN NEW ZEALAND



...was released on 19 March 2012. This report is the first in the Te Ohonga Ake series on the health of Māori children and young people commissioned by the Ministry of Health and produced by the NZ Child and Youth Epidemiology Service at Otago University.

The report reviews a range of hospital admission and mortality data, with a view to identifying the number of Māori children and young people with chronic conditions and disabilities accessing health services in New Zealand. Issues reviewed include autism, developmental delays and intellectual disabilities, cerebral palsy, cystic fibrosis, diabetes, epilepsy, and babies with congenital anomalies evident at birth (including cardiovascular anomalies, Down syndrome and neural tube defects). National survey data on overweight and obesity, and nutrition and physical activity in Māori children is also reviewed. The report also considers how Māori children are faring in the current economic downturn.

This publication is available online at <http://dnmeds.otago.ac.nz/departments/womens/paediatrics/research/nzcyes/maori.html>

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

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Close proximity to alcohol outlets is associated with increased serious violent crime in New Zealand

Authors: Day P et al

Summary: The association between geographic access to alcohol outlets and serious violent crime was examined in New Zealand. Serious violence offences recorded between 2005 and 2007 were aggregated for 286 police station areas. Geographical Information Systems geocoded 9,320 licensed premises and road travel distances to the closest alcohol outlet type/category were calculated for each area. Significant negative associations were observed between distance (access) to licensed outlets and the incidence of serious violent offences with increased levels of serious violent offending recorded in areas with close access to any licensed premises compared to those areas with least access (IRR 1.5; 95% CI, 1.10 to 2.03); with on-licensed premises (IRR 1.6; 95% CI, 1.16 to 2.08); and off-licensed premises (IRR 1.4; 95% CI 1.05 to 1.93).

Comment: Confirms the strong link between urban planning and health outcomes; and provides good evidence for those communities who are trying to stop alcohol outlet development in their neighbourhoods.

Reference: *Aust N Z J Public Health.* 2012;36(1):48-54.

<http://onlinelibrary.wiley.com/doi/10.1111/j.1753-6405.2012.00827.x/abstract>

Key opportunities for sodium reduction in New Zealand processed foods

Authors: Woodward E et al

Summary: These researchers systematically reviewed sodium content data in the New Zealand processed food supply in order to identify key opportunities for reformulation of processed foods to decrease population sodium intakes. Key opportunities for reformulation were identified by comparing mean sodium content with 2012 targets from the UK Food Standards Agency (FSA) and mean sodium values from Australia and the UK. Major contributors to New Zealand sodium intakes include bread (26%), processed meats (10%), and sauces (6%), with corresponding mean sodium contents of 447 mg/100 g, 1,169 mg/100 g, and 1,046 mg/100 g, respectively. Food categories with the lowest percentage of products meeting corresponding FSA targets were: sausages/hot dogs and sliced meat (0%); salami/cured meat (2%); liquid meal-based sauces (4%); and multigrain bread (14%). Mean sodium contents of New Zealand products were higher than for similar products in the UK.

Comment: Unfortunately, two of the food groups – sausages and high-salt bread – listed here are cheaper options, particularly the bread group where low-salt varieties can be twice the price of 'low-cost' (but often high-salt) bread.

Reference: *Aust N Z J Public Health.* 2012;36(1):84-9.

<http://onlinelibrary.wiley.com/doi/10.1111/j.1753-6405.2012.00829.x/abstract>

Seasonal patterns of mortality in relation to social factors

Authors: Hales S et al

Summary: These researchers sought to determine whether excess winter mortality in New Zealand varies with social factors. Records from censuses in 1981, 1986, 1991, 1996 and 2001 were each linked to 3 years of subsequent mortality data to create five cohort studies of the New Zealand adult population (age 30–74 years at census). Complete data on social variables were recorded for 58,683 deaths. In logistic regression analysis adjusting for age, sex, census year, ethnicity and tenure, those in the lowest tertile of income were at increased risk of winter death compared to those in the highest tertile (OR, 1.13). Compared to home owners, people living in rented accommodation were at greater risk of winter death (OR, 1.05). Urban dwellers were also at significantly increased risk (OR, 1.05). The strongest associations were seen for infectious diseases.

Comment: Certainly a situation that will need to be closely monitored, given the recent reports highlighting issues with home affordability in New Zealand; and housing shortages in some centres including Christchurch and Auckland.

Reference: *J Epidemiol Community Health.* 2012;66(4):379-84.

<http://jech.bmj.com/content/66/4/379.abstract>

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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.



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CALL FOR ABSTRACTS

Abstracts of up to **300 words** should be emailed to Amy Norman; anorman@hrc.govt.nz, telephone: +64 9 303 5081, by **5pm, Friday 30 March 2012**. Each conference presentation should be 15 minutes long and presenters should be willing to answer questions.

10 - 11 July 2012

Ellerslie Convention Centre
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<http://hui.hrc.govt.nz>

Pre-hospital delay in acute coronary syndromes: PREDICT CVD-18

Authors: Garofalo D et al

Summary: This study assessed components and determinants of pre-hospital delay in patients with acute coronary syndromes (ACS) admitted to Middlemore Hospital Coronary Care Unit between January 2009 and July 2010. Pre-hospital delay was defined as the time from onset of worst symptom(s) to defibrillator availability: either ambulance arrival at the scene or time of hospital arrival (non-ambulance patients). For 805 patients the median delay from symptom onset to defibrillator availability was 174 minutes; the delay to defibrillator availability was >3 hours for 50% of the cohort. The median delay was an hour longer for patients from areas of greatest deprivation compared with those from less deprived areas (208 vs 149 min; $p=0.015$) and 7 hours longer for non-ambulance vs ambulance patients (553 vs 130 min; $p<0.001$). Māori, Pacific, Indian and those from areas of higher deprivation were less likely to travel to hospital by ambulance. Of ST-elevation myocardial infarction patients eligible for reperfusion, over two-thirds of the total delay between symptom onset and reperfusion occurred pre-hospital.

Comment: Interventions to address the delays in time to ambulance care for Māori are essential, given the 7-hour difference between non-ambulance and ambulance patients. However, an examination of reasons for delayed access to an ambulance is required first. Too often clinicians tell me it is because Māori delay seeking care – however I'd like to know if this is true (or are people put off calling?) and if so what can be done about it.

Reference: *N Z Med J.* 2012;125(1348):12-22.

<http://journal.nzma.org.nz/journal/abstract.php?id=5020>

An examination of Māori tamariki (child) and taiohi (adolescent) traumatic brain injury within a global cultural context

Author: Elder H

Summary: This paper describes the size and shape of Māori tamariki (child) and taiohi (adolescent) traumatic brain injury (TBI) and reviews the wider international literature related to cultural factors and TBI. Scant research focuses on children and young people at highest risk of TBI. There is evidence of Māori tamariki and taiohi being significantly over-represented in TBI populations, with poorer outcomes including higher mortality rates. According to international research, 'minority' culture is a risk factor for certain causes of injury and a differential rehabilitation service response.

Comment: As the author suggests, given the high incidence and prevalence of TBI in tamariki and tai tamariki Māori, and poor outcomes including mental health issues, reduced educational achievement and incarceration, all health providers should consider a context of TBI in these settings. Application of tikanga Māori may be useful. However, I'd also like to see equity in clinical care, including diagnosis and management of TBI.

Reference: *Australas Psychiatry.* 2012;20(1):20-3.

<http://apy.sagepub.com/content/20/1/20.short>

Self-reported oral health, dental self-care and dental service use among New Zealand secondary school students: findings from the Youth 07 study

Authors: Areai DM et al

Summary: Data from the cross-sectional Youth 07: National Survey of the Health and Wellbeing of New Zealand Secondary School Students were explored to describe secondary school students' use of dental services and determine the nature and extent of any inequities by deprivation status and ethnicity. The researchers also examined students' toothbrushing practices and self-reported dental pain experience, past restorative treatment and tooth loss. The survey involved a representative sample of 9,098 secondary school students aged 13–17 years from 96 secondary schools across New Zealand. Seventy-two per cent of participants reported a dental visit in the previous 12 months; those who were more likely to have done so included females, those who brushed at least twice daily, and those who had been kept awake at night by dental pain. Those who were less likely included those identifying with Māori, Pacific or Asian ethnicity (and those in the 'Other' ethnic category) relative to European students, and those residing in medium- or high-deprivation areas relative to those in low-deprivation areas. One in seven participants reported having lost a tooth due to oral disease. Having had a tooth filled was reported by almost three-quarters of the sample, and having been kept awake by dental pain at night was reported by just over one in five. Almost two-thirds reported brushing their teeth twice or more in the previous 24 hours, and a small minority had not brushed at all.

Comment: Highlights the importance of having accessible dental service for Māori, Pacific and Asian students; and for those living in high-deprivation areas.

Reference: *N Z Dent J.* 2011;107(4):121-6.

<http://tinyurl.com/use-of-dental-services>

The pervasive effects of racism: experiences of racial discrimination in New Zealand over time and associations with multiple health domains

Authors: Harris R et al

Summary: This study investigated the prevalence of self-reported experience of racial discrimination in New Zealand by ethnicity, changes over time and associations with multiple health measures, using data from the 2002/03 ($n=12,500$) and 2006/07 ($n=12,488$) New Zealand Health Surveys, nationally representative population-based surveys of adults (≥ 15 years). Reported experience of racial discrimination was measured in both surveys and covered 5 items: experience of an ethnically motivated physical or verbal attack; and unfair treatment because of ethnicity by a health professional, in work, or when gaining housing. Reported experience of racial discrimination increased between 2002/03 (28.1% ever) and 2006/07 (35.0% ever) among Asian peoples but remained largely unchanged for other ethnic groupings (Māori 29.5%, Pacific 23.0%, European 13.5%). Experience of racial discrimination was associated with all negative health measures except excess body fat. Where there were significant associations, a dose-response relationship was also evident.

Comment: A major strength of this paper is that it builds on previous work. In doing so it not only confirms the impact racism has on health; but highlights the fact that research on this topic is both valid and robust.

Reference: *Soc Sci Med.* 2012;74(3):408-15.

<http://tinyurl.com/racism-impacts-on-health>

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Propranolol reduces implicit negative racial bias

Authors: Terbeck S et al

Summary: This study examined the role of noradrenergic mechanisms in the generation of implicit racial attitudes and involved 36 healthy volunteers of White ethnic origin, who were randomised to receive a single oral 40 mg dose of the β -adrenoceptor antagonist, propranolol (n=18) or a placebo (n=18). Participants completed an explicit measure of prejudice and the racial implicit association test, 1–2 h after propranolol administration. Relative to placebo, propranolol significantly lowered heart rate and abolished implicit racial bias, without affecting the measure of explicit racial prejudice. Propranolol did not affect subjective mood.

Comment: I have had a few requests for the paper following reports about the study's findings in local newspapers. Interestingly, treatment effects were most evident for 'unconscious' racism. However, as the authors suggest, biological research aiming to make people morally better is fraught with issues. Careful consideration to ethical issues is necessary.

Reference: *Psychopharmacology (Berl)*. 2012 Feb 28. [Epub ahead of print] www.springerlink.com/content/63v2561264075373/

Increasing incidence of serious infectious diseases and inequalities in New Zealand: a national epidemiological study

Authors: Baker MG et al

Summary: These researchers developed and applied a systematic method in order to monitor all hospital admissions for infectious and non-infectious diseases in New Zealand from 1989 to 2008. They investigated trends in incidence and distribution by ethnic group and socioeconomic status. Infectious diseases were the largest contributor to hospital admissions of any cause, increasing from 20.5% of acute admissions in 1989-93 to 26.6% in 2004-08. Ethnic and social inequalities were noted for infectious disease risk. In 2004-08, the age-standardised rate ratio was 2.15 for Māori (Indigenous New Zealanders) and 2.35 for Pacific peoples compared with the European and Other groups. The ratio was 2.81 for the most socioeconomically deprived quintile compared with the least deprived quintile. These inequalities have increased substantially in the past 20 years, particularly for Māori and Pacific peoples in the most deprived quintile.

Comment: An example of the need to continue collecting and analyzing valid, reliable, comparable data for trends, levels and inequalities in order to monitor progress and plan services. More importantly, the findings underscore the fact that social effects are the biggest contributor to these health inequities in New Zealand.

Reference: *Lancet*. 2012 Feb 17. [Epub ahead of print] [www.thelancet.com/journals/lancet/article/PIIS0140-6736\(11\)61780-7/abstract](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(11)61780-7/abstract)

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