Greetings

Welcome to Māori Health Research Review for 2013. I hope that you all managed to have a break over the summer as I’m sure it is well deserved! Thank you for all the lovely messages and best wishes for the new year. I look forward to sharing new and exciting research with you again this year.

Nga mihi

Matire

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Measuring potentially avoidable and ambulatory care sensitive hospitalisations in New Zealand children using a newly developed tool

Authors: Craig E et al

Summary: This paper describes a novel tool designed to measure Potentially Avoidable (PAH) and Ambulatory Care Sensitive (ACSH) Hospitalisations in New Zealand children. The study examined whether the PAH and ACSH can clarify if policies or programmes addressing the underlying determinants of health (e.g. poor housing, exposure to cigarette smoke, child poverty) reduce hospitalisations in this age group. Data consisted of all acute and semi acute (<1 week of referral) hospitalisations in New Zealand children aged 29 days–14 years during 2000–2009, as well as all hospitalisations for selected dental conditions. The PAH and ACSH determined category membership; explanatory variables included age, gender, ethnicity and NZ Deprivation index decile. During 2005–2009, 47.4% of all acute paediatric hospitalisations were categorised as PAH, 34.3% as ACSH and 9.7% as non-avoidable. A further 42.9% were grouped as non-classified conditions. Dental conditions and gastroenteritis were the leading causes of both PAH and ACSH. PAH and ACSH were highest in infants and one-year-olds, while non-avoidable hospitalisations were more evenly distributed throughout childhood. PAH and ACSH were higher for those from deprived areas and for Pacific and Māori children. Socioeconomic differences for non-avoidable hospitalisations were less marked, with rates being lowest in Māori and Asian children.

Comment: These new tools aimed to include wider determinants of health (e.g. housing, deprivation, etc.) and to be more ‘child-specific’ (with the removal of adult conditions and treatments). Whilst many suggest ‘better primary care’ will address high and disparate rates in PAH, the authors have attempted to define what this means (i.e. access to immediate and after-hours primary care, better quality of primary care) as well as highlighting the need to evaluate the capacity of primary care to further buffer the effects of worsening socioeconomic circumstances on hospital admission rates.


Mātātuhi Tuawhenua: Health of Rural Māori 2012

Mātātuhi Tuawhenua: Health of Rural Māori 2012 was released on 28 August 2012. Published by the Ministry of Health, the report gives a snapshot of the health of Māori and non-Māori living in rural and urban areas. The report provides a descriptive analysis of data from routinely collected data sources and the statistical information has been made accessible in an easy-to-use format.

Download or order a copy of the publication online at http://www.health.govt.nz/publication/matatuhi-tuawhenua-health-rural-maori-2012

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

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**Associations between maternal experiences of racism and early child health and development: findings from the UK Millennium Cohort Study**

**Authors:** Kelly Y et al

**Summary:** Data were analysed from the UK Millennium Cohort Study on 2136 mothers and their 5-year-old children from ethnic minority groups, in this investigation into the impact of mothers’ experiences of racism upon various markers of early child health and development (obesity and socioemotional difficulties, as well as cognitive indicators: verbal, non-verbal and spatial ability test scores). Measures of racism included mothers’ experiences of perceived frequency of racist attacks in residential areas and interpersonal racism. Perception of racism in residential areas was associated with socioemotional difficulties (fully adjusted coefficient=−1.40) and spatial abilities (fully adjusted coefficient=−1.99). Mothers’ experience of interpersonal racism was associated with an increased risk of obesity (‘received insults’ OR=1.47; ‘treated unfairly’ OR=1.57; ‘disrespectful treatment by shop staff’ OR=1.55), but all CIs crossed 1.0, and size estimates were attenuated on further statistical adjustment. Maternal experiences of racist insults were associated with non-verbal ability scores (fully adjusted coefficient=−1.70, SE=0.88).

**Comment:** See below.

**Reference:** J Epidemiol Community Health 2013;67(1):35-41
http://jech.bmj.com/content/67/1/35.abstract

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**Ethnicity, body mass index and risk of pre-eclampsia in a multiethnic New Zealand population**

**Authors:** Anderson NH et al

**Summary:** These researchers retrospectively analysed maternity data for 26,254 singleton pregnancies recorded during the period 2006 to 2009 at National Women’s Health, Auckland, New Zealand. The study hypothesis was that after adjusting for confounders, including ethnic-specific body mass index (BMI), ethnicity would not be an independent risk factor for pre-eclampsia. Multivariable logistic regression analysis adjusted for ethnicity, BMI, maternal age, parity, smoking, social deprivation, diabetes, chronic hypertension and relevant pre-existing medical conditions. Findings revealed an independent reduced risk of pre-eclampsia in Chinese (adjusted odds ratio [aOR] 0.56) and an increased risk of pre-eclampsia in Māori (aOR 1.51) compared with European women. Other independent risk factors for pre-eclampsia included overweight and obesity, nulliparity, type 1 diabetes, chronic hypertension and pre-existing medical conditions.

**Comment:** I’ve grouped these two papers together to highlight the fact that whilst international researchers are recognising the impact of cumulative racism before and during the haputanga period on maternity and neonatal outcomes, NZ-based clinicians were surprised to see that ethnic disparities in pre-eclampsia rates were not due to ‘ethnic-specific BMI’. Perhaps they should watch this video on YouTube: http://www.youtube.com/watch?v=k8fuzh4d544. Of note, many indigenous researchers suggest that impacts occur longer than the ‘life course’ and are instead ‘historical’ stressors. This is discussed further in the adjacent paper.


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**Bodies don’t just tell stories, they tell histories: embodiment of historical trauma among American Indians and Alaska Natives**

**Authors:** Walters KL et al

**Summary:** This paper seeks to clarify the link between historical trauma and the concept of embodiment. The researchers explain that present-day health inequities among Native American communities are increasingly being attributed to historical trauma, which has been described as traumatic events targeting a community (e.g., forced relocation) that cause catastrophic upheaval and result in pernicious effects that persist across generations through a myriad of mechanisms from biological to behavioural. However, the scant scholarship on historical trauma and the various conceptualisations of these events have so far prevented any convincing theorisation of historical trauma and measurement of its impact on Native health. The paper’s authors utilise ecocultural theory and the indigenist stress-coping model to argue that contemporary physical health reflects, in part, the embodiment of historical trauma. They discuss future research directions.

**Comment:** See adjacent.

http://tinyurl.com/aenbbvf

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**Māori Health Review**

**Independent commentary by Dr Matire Harwood**

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Medical readmissions amongst older New Zealanders

Authors: Robinson T, Kerse N

Summary: These researchers used New Zealand Ministry of Health data on hospitalisation and mortality to examine rates of medical readmissions among older people in New Zealand. Of 95,318 acute medical admissions in ≥65-year-olds during the period 1 April 2009 to 31 March 2010, 16.1% of admissions were followed by a readmission within 30 days. Within 90 days, 27.8% of admissions were followed by a readmission. The risk of readmission was greater in Māori and Pacific people compared with other ethnic groups. Increasing age, male gender and increased deprivation were also associated with increased risk of readmission. People being readmitted had more complex and costly illnesses and suffered poorer outcomes.

Comment: Medical readmissions, if predicted and effectively prevented, represent an opportunity to improve people’s outcomes, reduce disparities and reduce health service costs. A number of projects between DHBs and primary care providers, aiming to manage readmissions for people with long-term conditions, are either underway or being evaluated. All require attention to reducing readmission rates for Māori whānau.


Evaluating a healthy eating, healthy action program in small Māori communities in Aotearoa, New Zealand

Authors: Mercer C et al

Summary: Outcomes are reported from an evaluation performed between 2009 and 2010 of Project REPLACE, a programme developed as part of the national ‘Healthy Eating Healthy Action’ strategy by a Māori primary health organisation (PHO) in a regional centre of Aotearoa, New Zealand. Project REPLACE aimed to improve the health of the local Māori communities. Programme participants were invited to gradually change their behaviour by replacing behaviours potentially detrimental to health with healthier alternatives. The evaluation revealed that each community was innovative in their approaches to implementing Project REPLACE, drawing on their culture to combine healthy eating with increased exercise activities as well as measurements of achievement. The relationship that each coordinator had with the community was pivotal to the success of the programme. Project REPLACE highlighted the importance of Māori ownership and control of health initiatives.

Comment: A great paper reporting on the learning and findings of a Māori-led project.


What are the priorities for developing culturally appropriate palliative and end-of-life care for older people? The views of healthcare staff working in New Zealand

Authors: Bellamy G, Gott M

Summary: Two joint interviews and 10 focus groups conducted with 80 healthcare staff across a range of primary, secondary and specialty care settings in 2010 explored their views regarding the provision of culturally appropriate palliative care for Māori, Pacific Island and Chinese elders living in Auckland, New Zealand. Participants regarded the involvement of family as fundamental to the provision of palliative care for older people. The healthcare staff indicated the importance of enabling family members to provide ‘hands-on’ care for Māori and Pacific Islanders, while the role of family in decision-making was fundamental to the delivery of and satisfaction with care for older Chinese family members. Chinese elders favoured collective decision-making. Care staff highlighted the importance of appreciating individual preferences both within and across cultures as a fundamental aspect of palliative care provision. They maintained that the role of family in ‘hands-on’ palliative care and decision-making requires care staff to relinquish their role as ‘expert provider’. Finally, they considered that it is important to provide families with the requisite knowledge and skills to give care to older family members.

Comment: I was interested to read this paper providing an analysis of the views of healthcare staff, rather than people being cared for by their whānau. One area for concern was the statement that staff felt that family wanting ‘*hands-on*’ palliative care… requires staff to relinquish their role as ‘expert provider’”. I’d argue that people and whānau expect staff to continue to provide their expertise (in nursing care, treatment, nutrition, etc.) but work as a team to provide patient-centred care.

Reference: Health Soc Care Community 2013;21(1):26-34

Alcohol outlet density is related to police events and motor vehicle accidents in Manukau City, New Zealand

Authors: Cameron MP et al

Summary: This study analysed population, crime, crash and liquor licence data from Manukau City, New Zealand, to establish whether there was a link between alcohol availability and “negative social outcomes”. Data for the Census Area Unit (suburb) level were converted into per-capita measures of alcohol outlet density for January 2009 in regard to off-licence outlets, clubs and bars, restaurants and cafés. Likewise, data on police events and motor vehicle accidents were obtained for the period 1 July 2008 to 30 June 2009 and converted into per capita measures. All three outlet density measures were significantly associated with a range of police events, but only off-licence density was significantly associated with motor vehicle accidents (MVAs). An additional off-licence outlet in a given area was associated with 85.4 additional police events and 10.3 additional MVAs; an additional club or bar was associated with 34.7 additional police events and 0.5 additional MVAs; an additional restaurant or café was associated with 13.2 additional police events and 2.1 additional MVAs.

Comment: The authors state clearly that this study did not prove that higher alcohol outlet density caused police events in Manukau over a 12-month period in 2008/9. However, while the association between off-licence density (e.g. more bottle stores, dairies or supermarkets selling alcohol) and MVAs was statistically significant, the study area was small and the results are now over three years old. Another study is required, given the recent change in city infrastructure and considerable lag in time.


TE OHONGA AKE: THE HEALTH STATUS OF MĀORI CHILDREN AND YOUNG PEOPLE IN NEW ZEALAND

Te Ohonga Ake: The Health Status of Māori Children and Young People in New Zealand was released on 7 December 2012. The report is the second 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 New Zealand Child and Youth Epidemiology Service at Otago University. The report explores the health status of Māori infants, children and young people using a range of routinely collected data sources.

The publication is available online at http://dnmeds.otago.ac.nz/departments/womens/paediatrics/research/nzcyes/index.html

www.maorihealthreview.co.nz
The experience and impact of gout in Māori and Pacific people

Authors: Dalbeth N et al

Summary: This paper describes the experience and impact of gout in Māori and Pacific people. A cohort of 291 patients (37 Māori, 35 Pacific, and 219 not Māori or Pacific) with gout for <10 years were recruited from primary and secondary care settings. The baseline study visit included a comprehensive clinical assessment. Serum urate, flare frequency and activity limitation were recorded at baseline and after 1 year. Māori and Pacific participants had earlier age of onset (by 9 years), higher flare frequency and more features of joint inflammation. Serum urate concentrations were higher in the Māori and Pacific patients at baseline, despite greater use of allopurinol. Māori and Pacific patients reported greater pain and activity limitation and lower health-related quality of life. The cost of gout treatment was more than 3-fold higher in the Māori and Pacific patients. After 1 year, the higher flare frequency and activity limitation persisted in the Māori and Pacific patients.

Comment: Variables such as reduced health literacy, longer periods of inadequate care and limited access to quality gout management are more likely in Māori and Pacific people with gout. It is therefore timely that Susan Reid (Workbase) and others are developing health literacy tools and resources for Māori and Pacific people with gout.

Reference: Clin Rheumatol 2012 Nov 1 [Epub ahead of print]

Incidence of traumatic brain injury in New Zealand

Authors: Feigin VL et al

Summary: The BIONIC (Brain Injury Outcomes New Zealand In the Community) study examined data from all cases of TBI (admitted to hospital or not, fatal or non-fatal) registered in an urban (Hamilton) and rural (Waikato District) population over a 1-year period (from 1 March 2010 to 28 Feb 2011) and estimated the burden of TBI in rural and urban populations in New Zealand across all ages and TBI severities. The total incidence of TBI per 100,000 person-years was 790 cases (749 mild TBI and 41 moderate-to-severe TBI). Almost 70% of all TBI cases were in children (0–14 years) and younger adults (15–34 years). Males were nearly twice as likely as females to have a TBI (rate ratio 1.77). The leading causes of TBI were falls (38%), mechanical forces (21%), transport accidents (20%) and assaults (17%). Compared with New Zealand Europeans, Māori had a 23% greater risk of mild TBI. People living in rural areas were twice as likely to have moderate-to-severe TBI (73 per 100,000 person-years) compared with people living in urban areas (31 per 100,000 person-years).

Comment: This study confirms the silent epidemic that is TBI. Although the research has been meticulous in identifying cases, such dedication to diagnosis/coding is not happening in clinical settings. Others have shown that unrecognised TBI is prevalent in Aotearoa and as a result we see misdiagnosis (as ADHD), mismanagement (failure to address learning issues) and misdemeanors (high prevalence of Māori prison population with undiagnosed TBI). As the authors suggest, strategies to not only prevent TBI but diagnose and manage it are required for Māori.

http://www.thelancet.com/journals/laneur/article/PIIS1474-4422(12)70262-4/fulltext

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