Tēnā koutou katoa
Tēnā koutou, tēnā koutou, tēnā tātou katoa.
Naumai, haere mai ki tenei Tiorehanga hou Hauora Māori.

Greetings
Welcome to this issue of the Māori Health Research Review, and warm greetings for the Matariki season. Congratulations to the successful applicants of the recent HRC funding round. We have some fantastic Māori health research currently in Aotearoa and I look forward to seeing outcomes from the fantastic projects that are about to commence.

I also wish to acknowledge the recent passing of two significant people. Brian Milnes, co-director at Research Review, died suddenly last month. I will remember him as being especially helpful, patient and humourous with me! Nga mihi aroha ki a whānau Milnes, rga whānau Research Review. And to the whānau of Dr Tom Ellison, Taranaki, Ngati Porou and Ngai Tahu, I also offer my aroha and condolences.

Matire
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Identifying Māori ethnicity for estimating trends in fatal and serious non-fatal injury
Authors: Gulliver PJ et al
Summary: This paper sought to determine how well the ‘ever-Māori’ method corrects for the undercount of Māori in routinely collected health databases in New Zealand for estimating trends in fatal and serious non-fatal injury incidence. The study authors compared trends in frequencies and age-standardised rates for fatal injury indicators with the use of: (a) ever-Māori classification; (b) New Zealand Census Mortality Study adjustment ratios applied to Total Māori counts from the Mortality Collection; and (c) Total Māori counts from the Mortality Collection. For serious non-fatal injury, trends using ever-Māori were compared with Total Māori from hospital discharge data. Analyses found that while the absolute number of injuries attributable to Māori varied depending on the method used to adjust for ethnicity status, trends over time were comparable.

Comment: Good quality ethnicity data is necessary in order to measure and monitor health and health disparities; to measure progress and the effectiveness of health policies and programmes; and to plan. A great resource for those wanting to more information about ethnicity data collection is the paper by Drs Cormack and McLeod, available at: http://www.ethnicity.maori.nz/files/Improving_and_maintaining_WEB_ISBN.pdf


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Smokers have varying misperceptions about the harmfulness of menthol cigarettes: national survey data

Authors: Wilson N et al

Summary: This paper describes perceptions of relative harmfulness of menthol cigarettes in a sample of 923 adult smokers who participated in the New Zealand Health Survey. Smokers who were older, Māori, Pacific, Asian, financially stressed and who had higher levels of individual deprivation were more likely to agree with the statement that “menthol cigarettes are less harmful than regular cigarettes”. Most of these associations were statistically significant in at least some of the logistic regression models (adjusted for socio-economic and smoking beliefs and behaviour). In a fully-adjusted model, this belief was highest among Pacific smokers (adjusted odds ratio [aOR] 7.36) and menthol smokers (aOR 4.58). In this national sample, the majority of smokers (56%) and menthol smokers (73%) believed that menthols are “smoother on your throat and chest”.

Comment: The findings stress the importance of targeted health messages, policies and programmes for those most at risk; one size doesn’t fit all.


Child nutrition and lower respiratory tract disease burden in New Zealand: A global context for a national perspective

Authors: Grant CC et al

Summary: These researchers describe the nutritional status and acute lower respiratory infection (ALRI) disease burden of New Zealand children aged <5 years. Compared with other developed countries, New Zealand has a large ALRI disease burden in preschool-aged children, with 2- to 4-fold higher rates of pneumonia and bronchiolitis hospitalisation rates. The ALRI disease burden varies with ethnicity, being highest in Pacific, intermediate in Māori and lowest in European children. Three of the four key nutritional risk factors for ALRI disease burden globally (low birthweight, zinc deficiency and suboptimal breastfeeding) are potential contributors to ALRI disease burden in New Zealand. In addition, vitamin D deficiency during early childhood and maternal vitamin D deficiency are potentially important nutritional determinants of ALRI disease burden, particularly with respect to Pacific and Māori children, who have the larger disease burden.

Comment: Vitamin D deficiency, previously considered mainly in relation to bone disease, is increasingly believed to play a role in other health issues including CVD and now respiratory disease. The impact on Māori is yet to be quantified but I think we should watch this space!


Primary care practice and health professional determinants of immunisation coverage

Authors: Grant CC et al

Summary: During 2005–2006, these researchers surveyed a random sample of New Zealand primary care practices, with over-sampling of practices serving indigenous children, in this investigation into primary care factors associated with immunisation coverage. Practice immunisation coverage was defined as the percentage of registered children from 6 weeks to 23 months old at each practice who were fully immunised for age. A median of 71% of registered children at each of the 124 participating practices was fully immunised. In multivariate analyses, higher immunisation coverage was achieved by practices with no staff shortages (median practice coverage 76% vs 67%; p=0.004) and where doctors were confident in their immunisation knowledge (72% vs 67%; p=0.005). Coverage was lower if the children’s parents had received information antenatally, which discouraged immunisation (67% vs 73%; p=0.008). Coverage decreased as socio-economic deprivation of the registered population increased and as the children’s age and registration age increased.

Comment: I like the fact that the researchers have chosen to examine the ‘service issues’ contributing to immunisation outcomes. The findings are not only interesting but should inform some simple solutions.


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Alternatively, email queries can be sent to: whanauora@tpk.govt.nz, or call Te Puni Kōkiri on 04 819 6024.

For more information, please go to http://www.maorihealth.govt.nz
Five-year follow-up of an acute psychiatric admission cohort in Auckland, New Zealand

Authors: Wheeler A et al

Summary: This paper reports hospital psychiatric service utilisation over a 5-year period among 924 patients admitted (index admission) in Auckland during 2000. In the 5-year follow-up, 38.5% of the cohort had no readmissions anywhere in New Zealand, 41.0% were readmitted within 12 months and 61.4% were readmitted within 5 years of index discharge. Only 5.6% experienced an admission every year for the 5 years' post index admission. Readmission was least likely for those with an index discharge diagnosis of depression. Readmission was more likely among those with a history of admissions prior to index admission or who had Māori ethnicity. Those who were younger, had a diagnosis of schizophrenia/schizoaffective disorder or previous admissions tended to have longer total length of stay over the 5-year study period.


Comment: The findings from a simple review of hospital records. And thankfully the researchers plan to explore the quality of care for Māori in the community, rather than lay blame with the individuals.


Do enhancements to the urban built environment improve physical activity levels among socially disadvantaged populations?

Authors: Pearce JR, Maddison R

Summary: These researchers reviewed the published literature relating open space and street connectivity to physical activity and/or related health outcomes at a population level, and considered whether enhancements to the built environment have potential for addressing physical activity-related health inequalities among Māori, Pacific and low income communities in New Zealand. International research suggests that open space and street connectivity have a positive effect on physical activity behaviour. Enhancing the built environment may improve physical activity levels among disadvantaged populations.

Comment: Living in Auckland, I really notice the impact of urban planning/building on communities. It is easy to see those communities that have access to (and those lacking) safe spaces in which people can be physically active. The findings confirm the need for Māori participation in urban/regional planning; not only for protection of the environment but to also ensure that towns/cities are built in ways which do not contribute to health inequalities.


Differences in patients' perceptions of schizophrenia between Māori and New Zealand Europeans

Authors: Sanders D et al

Summary: Differences in illness perceptions between Māori and New Zealand Europeans were examined in a cohort of 111 users of mental health services (68 Māori, 43 New Zealand European) in the greater Auckland and Northland areas who had been diagnosed with schizophrenia or other psychotic disorder. All were interviewed using the Brief Illness Perception Questionnaire and the Drug Attitude Inventory. Māori with schizophrenia believed that their illness would last for a significantly shorter time than New Zealand European patients did. Among cause of mental illness, chance or spiritual factors were listed by five Māori patients and no New Zealand European patients. Other illness perceptions, as well as attitudes towards medication, were comparable between groups. Across groups, the top perceived causes were drugs/alcohol, family relationships/abuse, and biological causes.

Comment: The key point is that people, whilst defined by ethnicity such as Māori or by health need such as Tangata Whaiora, are not homogenous. And therefore, the management of their wellbeing, particularly for long-term conditions such as schizophrenia, requires discussion from them about their own beliefs without ‘putting words in their mouth’.

The associations between ethnicity and outcomes of infants in neonatal intensive care units

Authors: Ruan S et al

Summary: The associations were explored between maternal ethnicity and outcomes of infants born between 22 and 31 weeks' gestation and admitted to neonatal intensive care units in New South Wales and the Australian Capital Territory, Australia, between 1995 and 2006, using de-identified perinatal and neonatal outcome data for 10,177 infants (8,629 Caucasian, 922 Asian, 439 indigenous, 127 Polynesian and Māori (PAM)). Caucasians were the referent for all comparisons. Infants of indigenous mothers were less likely to receive antenatal steroids and three times as likely to be born in non-tertiary hospitals (OR 3.28; p<0.001). PAM infants were more likely to have Apgar scores <7 at 5 min of age (1.76; p<0.01), Asian infants had lower birth weight (mean 44.7; p<0.001) and head circumference percentiles (47.8; p<0.001), were more likely to be small for gestational age (1.53; p<0.001), less likely to have hyaline membrane disease (0.78; p<0.001) but had a higher risk of severe retinopathy of prematurity (1.52; p<0.01). Ethnicity did not influence infant mortality.

Comment: I agree with the final comment that a review of care by ethnicity is necessary, particularly as we are starting to understand the lasting impact that ante-, peri- and postnatal care has on our tamariki.

http://tinyurl.com/ethnicity-and-neonatal-outcomes

Increasing incidence of necrotizing fasciitis in New Zealand: A nationwide study over the period 1990 to 2006

Authors: Das DK et al

Summary: These researches used International Classification of Disease codes to identify cases of necrotising fasciitis (NF) occurring in New Zealand between 1990 and 2006, then analysed the national hospital discharge and mortality data and reviewed 299 charts from 8 hospitals in New Zealand. Annual incidence and mortality rates of NF rose significantly over the study period, from 0.18 to 1.69 and from 0 to 0.3 per 100,000 person-years, respectively. The study authors comment that the causes of this increase are unexplained, and were not related to 2004 coding changes for NF. Hospital discharge data were associated with a sensitivity and positive predictive value of 76.8% and 82.6%, respectively. The case fatality was 20.8%. Disease risk was highest in the elderly, males, and Pacific and Māori populations.

Comment: Given the very high hospitalisation rates for Māori and Pacific people with cellulitis, providers must be vigilant to the possibility of NF. And with such high case fatality, efforts to reduce incidence, such as prevention strategies, require urgent attention.

http://tinyurl.com/necrotising-fasciitis

Investigating reasons for ethnic inequalities in breast cancer survival in New Zealand

Authors: McKenzie F et al

Summary: These researchers investigated the role that demographic and tumour factors play in explaining ethnic inequalities in breast cancer survival, among 2,968 breast cancer cases notified to the New Zealand Cancer Registry (NZCR) from April 2005 to April 2007 that were followed-up to April 2009. Māori, Pacific and non-Māori/non-Pacific women were categorised according to ethnicity on the NZCR and comprised 17%, 76.5% and 6.5% of the study cohort, respectively. There were 433 recorded deaths. Relative survival rates at 4 years were 91.5% for non-Māori/non-Pacific, 86.2% for Māori, and 79.6% for Pacific women. Using non-Māori/non-Pacific as the reference group, the age-adjusted hazard ratio decreased for Māori from 1.76 to 1.43 when further adjusted by deprivation (analysed as quintiles of the New Zealand area-based index of socio-economic position) and decreased for Pacific women from 2.49 to 1.94. Inequalities persisted after adjustment for subtype variables (ER/PR/HER2), but adjusting for access to care variables (extent/size) eliminated the ethnic inequalities in excess mortality.

Comment: Confirms the importance of wider health determinants (deprivation) and services issues (access) in cancer survival for Māori women.

http://tinyurl.com/breast-cancer-survival