Geographic variations in diabetes in the Auckland Region

Ask our kaumātua about sleep hygiene

Poor compliance with safe sleeping guidelines

Smoking is not an ‘informed choice’ for young adults

Health system barriers for young Māori mothers wanting contraception

Routine antenatal HbA1c testing to detect type 2 diabetes?

Cognitive neuropsychological functioning in Māori diagnosed with schizophrenia

Ethnic disparities persist in cardiac interventions

Reducing the use of seclusion for Māori

The Māori experience of discrimination and its effects

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Tēnā koutou katoa
Nau mai mai te whānau katoa. He rangahau tuhi hou i nga rāhui kei te oratanga o te Māori. No reira noho ora mai o te koutou waahi i nga rāhui kei te oratanga o te Māori. He mea katoa i nga rāhui kei nga tūanga kei te oratanga o te Māori. Ngā mihi mahana 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
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Geography matters: the prevalence of diabetes in the Auckland Region by age, gender and ethnicity

Authors: Warin B et al.

Summary: These researchers used General Electoral Districts (GEDs) to identify and map geographical variations in diagnosed diabetes in the greater Auckland Region for the year 2011. Encrypted National Health Identifiers and record linkage of routine health datasets revealed an estimated 63,014 people with diagnosed type 1 or type 2 diabetes in Auckland in 2011, representing 8.5% of the adult population aged ≥30 years. The geographical unit of a person’s residence (meshblock) was used to determine the GED of residence. Diabetes prevalence varied significantly by age, gender, ethnicity and GED; in unadjusted analyses, the prevalence was more than 5-fold higher in Mangere (17.3%) as compared with in the North Shore (3.2%). Such variations remained after binary logistic regression adjusting for sociodemographic variables. Compared to New Zealand Europeans, Indian people had the highest odds of having diabetes at 3.85, while the odds of people living in the most deprived areas having diabetes was nearly twice that of those living in least deprived areas (OR 1.93; 95% CI, 1.87 to 1.99). Geographic variations in diabetes remained after adjusting for sociodemographic circumstances: people living in GEDs in south-west Auckland were at least 60% more likely than people living in the North Shore GED to have diabetes.

Comment: Really interesting findings for those of us working in Auckland. Although I suspect similar disparities exist in most places (i.e. Hamilton, greater Wellington, Hawkes Bay, etc.), I agree that access to healthy food in local neighbourhoods will be important, as will access to safe areas for activity. Although the authors suggest that the differences persisted after controlling for variables such as ethnicity, I can’t help thinking that institutionalised racism is in some way contributing to these geographic differences.


Abstract

DHB Māori Health Profile Summaries 2015
(Bi-Lingual)

Te Rōpū Rangahau Hauora a Eru Pōmare, University of Otago have released DHB Māori Health Profile Summaries 2015 funded by the Ministry of Health. The summaries are bilingual in te reo Māori and English.

The 20 summaries include indicators of whānau well-being, housing and income, health service use and health status. They are publicly available and can be used by any individual or organisation with an interest in hauora Māori.

http://www.otago.ac.nz/MHP2015

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

www.maorihealthreview.co.nz  a RESEARCH REVIEW publication
Sleep of Māori and non-Māori of advanced age

Authors: Gibson R et al.

Summary: This investigation into sleep problems among people of advanced age included 251 Māori and 398 non-Māori aged 79–90 years. The study researchers found that 25.5% of Māori and 31.7% of non-Māori reported a current sleep problem. Reporting a current sleep problem was more likely among non-Māori (adjusted OR 0.52; 95% CI, 0.30 to 0.90) and among those who reported a past sleep problem (adjusted OR 2.67; 95% CI, 1.25 to 5.72). In logistic regression analyses, sleep problems were related to poorer self-rated physical and mental health, as well as falls over the previous year. For instance, in regard to mental health, those reporting a current sleep problem were more likely to also score highly for symptoms of depression on the Geriatric Depression Scale than those who did not report a current sleep problem (OR 4.42; 95% CI, 2.40 to 8.14).

Comment: A good reminder of how important it is to recognise and address sleep problems. We tend to focus on sleep issues in middle-aged adults, and during pregnancy/the postnatal period. As the authors suggest, we must not forget to ask about sleep hygiene with our kaumatua, particularly when you consider their increased risk for poor sleep such as long-term conditions, polypharmacy and moko jumping into their beds (so says my mumi!).

Abstract

A prospective audit of adherence to safe sleeping guidelines in a general paediatric ward and special care nursery

Authors: Griffen J et al.

Summary: This audit assessed adherence to safe sleeping guidelines in a special care nursery (SCN, encompassing 161 sleeping environments) and general paediatric ward (GPW, 50 sleeping environments) in Canberra Hospital, Australia. Data were collected on 10 safe sleeping compliance rules, based on national and international guidelines. Supine sleeping compliance was high in both wards (83% SCN, 82% GPW). However, overall the median compliance score was significantly lower in the GPW compared to the SCN (7 vs 8; p<0.001). The lowest rates of compliance rates applied to removing soft items from the crib and infant positioning within the crib.

Comment: This research came to mind given the recent debate here re the prevention of sudden unexpected death in infancy (SUDI). This study was undertaken in Australia, and really highlights for me that education on its own doesn’t work. We need practical solutions to keep our pepi safe, and alive.

Abstract

A qualitative analysis of Māori and Pacific smokers’ views on informed choice and smoking

Authors: Gifford H et al.

Summary: This qualitative study explored how young adult Māori and Pacific smokers interpret ‘informed choice’ in relation to smoking, using data from in-depth interviews conducted with 20 Māori and Pacific young adults aged 18–26 years who smoked. The data were analysed within an informed-choice framework and overarching themes were identified. Additional themes specific to Māori and Pacific participants were also identified in the transcripts. Few participants considered themselves well informed and none met more than the framework’s initial two criteria. Most reflected on their unthinking uptake and subsequent addiction, and identified environmental factors that had facilitated uptake. Nonetheless, despite this context, most agreed that they had made an informed choice to smoke.

Comment: As the authors point out, ‘informed choice’ arguments are deeply flawed. “Young people cannot choose addiction when they do not understand what it will entail any more than they can accept risks they do not believe will affect them”. When tobacco companies claim that smokers make ‘informed choices’, they are in fact ‘blaming the victim’ rather than taking responsibility for developing, marketing and selling highly addictive and lethal products.

Reference: BMJ Open. 2016;6:e011415
Abstract

E Hine: access to contraception for indigenous Māori teenage mothers

Authors: Lawton B et al.

Summary: This analysis is part of ‘E Hine’, a longitudinal qualitative Kaupapa Māori (by Māori for Māori) study involving Māori women aged 14–19 years, following them through pregnancy (n=44) and the birth of their babies until their babies’ first birthdays (n=41). This analysis focused on contraception before and after pregnancy and aimed to identify any barriers and facilitators to contraception amongst Māori teenage mothers. Pre-pregnancy, most participants accessed contraception or advice, but contraception use was compromised by a lack of information, negative side effects, and limited follow-up. All reported their subsequent pregnancies as unplanned. Participants gave considerable thought to post-pregnancy contraception. However, many experienced clinical and service delays, financial barriers and negative contraceptive side effects. There was little focus on contraception initiation and a lack of integrated care between midwives and other primary care services, leaving many participants without timely effective contraception. The system worked well when there was a contraception plan that included navigation, free access, and providing contraception.

Comment: These results reflect my experience in general practice. I can’t help thinking that there are multiple ‘isms’ at play here based on gender, age and ethnicity.

Abstract
Universal HbA1c measurement in early pregnancy to detect type 2 diabetes reduces ethnic disparities in antenatal diabetes screening: a population-based observational study

Authors: Hughes RC et al.

Summary: This observational study compared inter-ethnic antenatal screening practices, including the uptake of both the first-antenatal blood screen and the universal two-step gestational diabetes (GDM) screen recommended at 24–28 weeks’ gestation, to establish the potential benefit of universal HbA1c testing in early pregnancy to detect unrecognised type 2 diabetes and prediabetes. The study included 11,580 pregnancies in Christchurch, New Zealand, during 2008–2010. Electronic databases were used to match maternal characteristics to first-antenatal bloods, HbA1c, and GDM screens (glucose challenge tests and oral glucose tolerance tests). Overall uptake of the first-antenatal bloods versus GDM screening was 83.1% and 53.8%, respectively. GDM screening was lowest in Māori (39.3%), resulting in an incidence proportion ratio (IPR) of 0.77 (95% CI, 0.71 to 0.84) compared with Europeans. By including HbA1c with the first-antenatal bloods, the number screened for diabetes increased by 28.5% in Europeans, 40.0% in Māori, 28.1% in Pacific People, and 26.7% in ‘Others’ (majority of Asian descent). The combined prevalence of unrecognised type 2 diabetes and prediabetes by New Zealand criteria, HbA1c ≥5.9% (41 mmol/mol), was 2.1% in Europeans, 4.7% in Māori (adjusted IPR 2.59; 95% CI, 1.71 to 3.93), 9.5% in Pacific People (aIPR 4.76; 95% CI, 3.10 to 7.39), and 6.2% in ‘Others’ (aIPR 2.99; 95% CI, 2.19 to 4.07). When these prevalence data were applied to the 2013 NZ national birthing data, routine antenatal HbA1c testing could have identified type 2 diabetes in 0.44% and prediabetes in 3.96% of women.

Comment: A really good idea and something to consider in our arsenal if we wish to better identify and manage pre-diabetes and its risk factors.


Cognitive neuropsychological functioning in New Zealand Māori diagnosed with schizophrenia

Authors: Kake TR et al.

Summary: Cognitive neuropsychological functioning was examined in 54 adult Māori diagnosed with schizophrenia and 56 controls, matched on sociodemographic variables, handedness and premorbid cognitive ability. The study also analysed associations between cognition, medication and symptoms of psychosis in the schizophrenia group. In neuropsychological testing of attention, executive ability, motor, premorbid ability, verbal/non-verbal memory and verbal fluency (English/Māori versions), performance was significantly poorer in the schizophrenia group versus the controls on all tests, except the test of attention. Effect sizes were moderate to large: 0.78 for motor function; 1.3 for executive ability, verbal fluency and visual memory; 1.6 for verbal learning and 1.8 for verbal memory. These differences persisted in analyses that adjusted for multiple comparisons and covariates. A higher dose of antipsychotic medication and a higher anticholinergic load were associated with greater verbal memory impairment (rho = −0.38 and r = −0.38, respectively). A longer duration of illness was associated with greater impairment of verbal memory (rho = −0.48), verbal learning (rho = −0.41) and visual memory (rho = −0.44).

Comment: A major health issue that receives little attention. I was fascinated with the level of detail revealed, which sheds light not only on the condition and its effects, but importantly on how we can better manage it.


Ethnic differences in coronary revascularisation following an acute coronary syndrome in New Zealand: A national data-linkage study (ANZACS-QI 12)

Authors: Grey C et al.

Summary: This research sought to determine ethnic differences in angiography and revascularisation rates among 50,324 30–84-year-olds hospitalised with an acute coronary syndrome (ACS) in New Zealand between 2007 and 2012. Patients’ ethnicities were Māori (10%), Pacific (4%), Indian (3%) and New Zealand European or Other (NZEO, 83%). Compared with all other ethnicities, Māori were admitted more often to hospitals without catheterisation facilities (48% vs 36% of NZEO, 19% of Pacific people and 14% of Indian patients), Māori and Pacific patients had a higher comorbidity burden (22–24%) compared with NZEO and Indian patients (12–13%). Multilevel Cox regression, accounting for individual factors and admitting hospital, was used to estimate adjusted procedural rates within 30 days of admission. Māori and Pacific were less likely than NZEO patients to undergo angiography (adjusted HRs 0.94 [95% CI, 0.91 to 0.98] and 0.93 [95% CI, 0.87 to 0.98], respectively) and revascularisation (adjusted HRs 0.79 [95% CI, 0.75 to 0.83] and 0.77 [95% CI, 0.71 to 0.83]), even after adjusting for important demographic and clinical factors.

Comment: Getting past the shameless self-promotion, these findings are both disappointing AND hopeful. As some of you know, we did a similar review for the years 1996 to 2004, which showed significant disparities between Māori and non-Māori. So I was disappointed to see that unequal treatment, or ethnic disparities in cardiac interventions, persist a decade later. However, ACS investigation and intervention inequities have improved; a lot of it is due to quality improvement activities that hope to achieve equity. Such work must continue.


Te Ohonga Ake: The Determinants of Health For Māori Children and Young People in New Zealand: Series Two

This report was released on the 29th of April. Funded by the Ministry of Health and produced by the NZ Child and Youth Epidemiology Service of the University of Otago, the report provides a snapshot of progress addressing many of the determinants of health including child poverty and living standards, housing, early childhood education, oral health, tobacco use, alcohol related harm, and children’s exposure to family violence. The report is available to download at: http://www.health.govt.nz/publication/te-ohonga-ake-determinants-health-maori-children-and-young-people-new-zealand-series-two

For more information, please go to http://www.maorihealth.govt.nz
Strategies to reduce the use of seclusion with tāngata whai i te ora (Māori mental health service users)

Authors: Wharewea-Mika JP et al.

Summary: Huge ethnic disparities surround the use of seclusion in adult mental health inpatient units in New Zealand, with Māori not only more likely to be secluded than non-Māori, but also, Māori have the highest crude population-based rate of seclusion events reported internationally (McLeod M et al. Te Pou o Te Whakaaro Nui, 2013). This qualitative study explored Māori clinical, cultural and consumer perspectives on potential strategies and initiatives considered likely to facilitate prevention of, and reduction in, the use of seclusion, with tāngata whai i te ora (Māori mental health service users) in mental health inpatient services. Sixteen people of Māori ethnicity, all of whom had high levels of clinical, cultural and consumer expertise, participated in a 2-day hui, which was recorded and transcribed. Thematic analysis revealed three key categories: Te Ao Māori (access to a Māori worldview); Te Ao Hurūri (transforming practice); and Rangatiratanga (leadership, power, and control). The findings of this study align with the “Six Core Strategies” for best practice to reduce the use of seclusion (Hacketh KA, Adm Policy Ment Health, 2006;33(4):482-91), with the overall aim of transforming treatment environments to minimise the occurrence of conflict and facilitate immediate resolution when conflict does occur. This paper concludes that a comprehensive approach to the reduction of the use of seclusion with tāngata whai i te ora is required, embedded within a Māori model of care and a vision for transformation of practice in mental health inpatient services and involving Māori leadership.

Comment: A wonderful example of consultation in ways that are meaningful for whānau and services; and in ways that provide meaningful information.


Perceived discrimination predicts increased support for political rights and life satisfaction mediated by ethnic identity: A longitudinal analysis

Authors: Stronge S et al.

Summary: Predictions derived from the rejection-identification model and research on collective action suggest that the recognition of discrimination can both motivate support for political rights and increase well-being by strengthening in-group identity. These researchers tested these predictions via cross-sectional (Study 1, n=1981) and longitudinal (Study 2, n=1373) analyses using data from a large national probability sample of Māori, collected as part of the New Zealand Attitudes and Values Study. Consistent with the extant research, Study 1 showed that perceived discrimination was directly linked with decreased life satisfaction, but indirectly linked with increased life satisfaction through higher levels of ethnic identification. Perceived discrimination was also directly linked with increased support for Māori rights and indirectly linked with increased support for Māori rights through higher levels of ethnic identification. Study 2 replicated these findings using longitudinal data and identified multiple bidirectional paths between perceived discrimination, ethnic identity, well-being, and support for collective action.

Comment: This paper adds to the increasing body of knowledge about the Māori experience of discrimination and its effects. How do we support whānau to recognise discrimination in a way that allows them to then “take action” in positive ways?


Time spent reading this publication has been approved for CME for Royal New Zealand College of General Practitioners (RNZCGP) General Practice Educational Programme Stage 2 (GPEP2) and the Maintenance of Professional Standards (MOPS) purposes, provided that a Learning Reflection Form is completed. Please CLICK HERE to download your CPD MOPS Learning Reflection Form. One form per review read would be required.

Time spent reading this publication has been approved for CNE by The College of Nurses Aotearoa (NZ) for RNs and NPs. For more information on how to claim CNE hours please CLICK HERE.

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.