

Māori Health Review™



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Issue 67 – 2017

In this issue:

- > *Gardasil® vaccination: an early population effect in females*
- > *Ethnic inequality in diagnoses of depression and anxiety disorders*
- > *Higher use of seclusion for Māori in NZ inpatient mental health services*
- > *'My Home is My Marae': a holistic approach to injury prevention*
- > *NZ efficiency at producing life expectancy gains*
- > *Ethnic disparities in infectious disease hospitalisations in infancy*
- > *Mitigating BMI in an after-school care programme*
- > *A culturally tailored text message maternal health programme*
- > *Addressing Māori ethical concerns about tissue biobanks*
- > *Newly diagnosed gout: an increased mortality risk*

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Ngā mihi

Matire

Dr Matire Harwood

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Trends in genital warts diagnoses in New Zealand five years following the quadrivalent human papillomavirus vaccine introduction

Authors: Oliphant J et al.

Summary: New Zealand introduced the quadrivalent human papillomavirus (4vHPV) vaccine (Gardasil®) on 1 September 2008 followed by the school-based arm of the vaccination programme from February 2009 and an initial catch-up programme through to the end of 2010, targeting women before they turned 20 years of age. This paper reports data on genital wart diagnoses among all new clients attending the Auckland Sexual Health Service (ASHS) from 1 January 2007 to 31 December 2013. Over the study period, 43,480 new clients were seen at ASHS and genital warts were diagnosed in 5,711 (13.1%). Of the 19,894 female new clients seen, ethnicity was recorded as: NZ European 39.5%, Māori 15.1%, Pacific Peoples 13.0%, Other 32.5%. There was a general decrease across time in the diagnoses of genital warts among all ethnic groups presenting to ASHS. For females, there was evidence of a difference in the rate of change over time in the proportion of genital warts diagnoses in the vaccine-eligible cohort compared to the vaccine-ineligible cohort ($p=0.004$). Whereas the proportion of females diagnosed with genital warts each year was fairly stable in the vaccine-eligible cohort pre-vaccine ($RR=0.98$), the risk of diagnosis decreased markedly over the 5 years after the introduction of the vaccine ($RR=0.77$). In comparison, there was only a small decrease in proportion of genital warts diagnoses among non-eligible females (pre-vaccine $RR=0.87$ vs post-vaccine $RR=0.95$). There was no such significant difference in rate change pre- to post-vaccine between younger and older men, eligible or not ($p=0.53$). Notably, Māori and Pacific young women had the largest decreases in genital warts diagnoses post-vaccine introduction (93.4% each) followed by NZ European (80.2%).

Comment: Although vaccinations continue to receive bad press by some, I find the misinformation about vaccinations developed for women's health particularly worrisome. Rates of genital warts are higher for Māori women than non-Māori. In my experience, patients with the condition describe it as being debilitating and stigmatising, and tell me that they would have chosen the vaccine if it had been available.

Reference: *N Z Med J.* 2017;130(1452):9-16

[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.



Ethnic inequality in diagnosis with depression and anxiety disorders

Authors: Lee CH et al.

Summary: These researchers analysed responses from 15,822 participants in the 2014/15 New Zealand Attitudes and Values Study (NZAVS) longitudinal panel. Their analysis explored ethnic disparities in self-reported diagnosis of depression or an anxiety disorder by a doctor, relative to scores on the screening measure (the Kessler-6 scale) for these same forms of mental illness in a nationally representative sample of New Zealand adults. Māori, Pacific and Asian New Zealanders were more likely to score in the 'at risk' range of the Kessler-6 scale, indicating an increased likelihood of depression or anxiety, relative to European New Zealanders. However, the highest rate of actual diagnosis with depression or anxiety in the previous 5-year period was reported by European New Zealanders, rather than Māori, Pacific and Asian New Zealanders.

Comment: See below.

Reference: *N Z Med J.* 2017;130(1454):10-20

[Abstract](#)

Ethnic disparities in the use of seclusion for adult psychiatric inpatients in New Zealand

Authors: McLeod M et al.

Summary: This paper reports on disparities in seclusion between Māori and non-Māori non-Pacific (nMnP) adults within New Zealand's inpatient mental health facilities. Anonymised data were analysed from a New Zealand Ministry of Health dataset (PRIMHD) concerning 7,239 inpatient psychiatric admissions and 782 seclusion events for 9 district health boards (DHBs) (servicing 39% of the New Zealand population) from 1 July 2008 to 30 June 2010. Of all general adult psychiatric inpatient admissions for Māori, 15.2% included ≥ 1 seclusion event compared to 9.2% for nMnP admissions ($p < 0.001$). Moreover, Māori male and female admissions to the inpatient unit were significantly more likely to be secluded than nMnP of the same gender. Of Māori male admissions, 16.7% were secluded compared with 10.7% of nMnP ($p < 0.001$); 13.3% of Māori female admissions were secluded versus 7.6% of nMnP ($p < 0.001$). Modelled seclusion event rate ratios for Māori compared to nMnP, sequentially adjusted for demographic and admission factors, revealed that Māori psychiatric inpatients are 39% more likely to experience a seclusion episode than nMnP adults in New Zealand. After fully adjusting for all sociodemographic variables (age, gender and NZDep06) and clinical characteristics (referral pathway, legal status and diagnosis on admission), the higher rate for Māori reduced slightly to 33%.

Comment: There has been a lot of social and mainstream media interest in the results published in these two papers – which is fantastic! I encourage readers to consider reviewing the website www.peoplesmentalhealthreport.com and signing the letter there. The HRC has also recently announced research funding opportunities to address some of these issues – see www.hrc.govt.nz.

Reference: *N Z Med J.* 2017;130(1454):30-9

[Abstract](#)

My Home is My Marae: Kaupapa Māori evaluation of an approach to injury prevention

Authors: Hayward B et al.

Summary: Outcomes are reported from an evaluation of the New Zealand Accident Compensation Corporation's (ACC) 'My Home is My Marae' approach to injury prevention for whānau (families). Drawing from Māori models of health means that this approach is whānau inclusive (reflecting the hauora of the whānau), whānau empowering (improving knowledge and awareness of whānau to reduce, eliminate or isolate hazards in their whare), environmental (making changes in the home – te oa turoa) and physical (reducing the risk or incidence and/or severity of injury in the home – te taha tinana). From November 2013 to June 2014, 14 'My Home is My Marae' trials were conducted across the South Auckland and Far North regions of New Zealand. All were delivered by local Māori providers of healthcare, education and social services. This evaluation team interviewed a purposive sample of 14 kaimahi (staff) from 6 of the provider organisations. A Kaupapa Māori theory-based methodology identified 5 key critical success factors in 'My Home is My Marae': mana tangata (reputation, respect and credibility); manākitanga (showing care for people); kānohi-ki-te-kānohi (face-to-face approach); capacity building for kaimahi, whānau and providers and 'low or no cost' solutions to hazards in the home. Data collected for the Far North area showed that 76% of the hazards identified could be resolved through 'low or no cost' solutions. No such data were available for South Auckland.

Comment: Great to see Kaupapa Māori research in ACC being published. The list of 'low and no cost' solutions may be useful for readers – see ACC's website <http://www.acc.co.nz/preventing-injuries/at-home/index.htm>.

Reference: *BMJ Open.* 2017;7:e013811

[Abstract](#)

CONGRATULATIONS TO Dr Robin Rund who won an iPad mini 3 by taking part in our recent subscriptions update promotion. Robin is an Anaesthetist at the Bay of Plenty District Health Board.

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Dementia: Supplementary Findings from LiLACS NZ for Section Five, 'Service Use and Common Health Conditions' in the report 'Health, Independence and Caregiving in Advanced Age'

Funded by the Ministry of Health, the University of Auckland will release the report *Dementia: Supplementary Findings from LiLACS NZ for Section Five, 'Service Use and Common Health Conditions'* in the report *'Health, Independence and Caregiving in Advanced Age'* on the 10th of May 2017. This report establishes how the presence of dementia affects older Māori and non-Māori (aged 80 years and above), and the services they use when the dementia patients also have cardiovascular disease, chronic lung disease and diabetes mellitus.

The study found that dementia was associated with lower functional status, higher frailty, poorer mental and physical health-related quality of life and higher health service use and cost. The combination of dementia with any of the physical health conditions studied in the report (cardiovascular disease, chronic lung disease, and diabetes mellitus) worsened health status and increased health service use and costs.

The project *Te Puāwaitanga O Ngā Tapuwae Kia Ora Tonu/ Life and Living in Advanced Age, a Cohort Study in New Zealand (LiLACS NZ)* is a longitudinal cohort study of New Zealanders in advanced age. LiLACS NZ is the world's first longitudinal study of an indigenous population aged 80 and over.

The report, along with the 13 previously released LiLACS NZ reports, can be found at the University of Auckland website:

<https://www.fmhs.auckland.ac.nz/en/faculty/lilacs/research/publications.html>

How efficient are New Zealand's District Health Boards at producing life expectancy gains for Māori and Europeans?

Authors: Sandiford P et al.

Summary: This paper details the efficiency and financial performance of New Zealand's 20 DHBs in terms of achieving life expectancy (LE) gains for their Māori and European populations between 2006 and 2013. Data were analysed from period life tables produced by Statistics New Zealand for each ethnic group in each DHB using the 2006 and 2013 censuses. The data from these tables were combined with mortality data from the periods 2005–07 and 2012–14. The researchers found that the use of LE change is an effective indicator of managerial effectiveness. In all DHBs, LE improved for both Europeans and Māori, but at a greater rate for Māori. LE gains were unrelated to the proportion of Māori in the DHB in 2006 (correlation coefficient $r=-0.16$; $p=0.49$). Moreover, the change in Māori life expectancy was not associated with the initial LE in 2006 ($r=0.19$; $p=0.42$), suggesting that change was not limited at the upper end of the range. This was also true for Europeans ($r=0.31$; $p=0.19$). The efficiency of each DHB ranged from 79% to 100% and was significantly correlated with DHB financial performance.

Comment: Interesting results, although two queries came to mind. First, are there better markers to show the impact of DHB-led care on health inequities? Second, how do we safeguard the ways in which 'improved Māori health and reduced inequities' are reported? For example, our local paper asked 'why is Māori LE improving faster than that of NZ Europeans?', which seemed to suggest this was not a positive thing.

Reference: *Aust NZ J Public Health. 2017;41(2):125-9*
[Abstract](#)

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Ethnic disparities in infectious disease hospitalisations in the first year of life in New Zealand

Authors: Hobbs MR et al.

Summary: This paper describes risk factors associated with infectious disease (ID) hospitalisation in infancy within a cohort of 6,846 New Zealand children, born in 2009–2010. In multivariable logistic regression analyses involving all children, factors associated with ID hospitalisation in the first year of life included Māori (OR 1.49; 95% CI, 1.17 to 1.89) or Pacific (OR 2.51; 95% CI, 2.00 to 3.15) versus European maternal ethnicity, male gender (OR 1.32; 95% CI, 1.13 to 1.55), low birthweight (OR 1.94; 95% CI, 1.39 to 2.66), exclusive breastfeeding for <4 months (OR 1.22; 95% CI, 1.04 to 1.43), maternal experience of healthcare racism (OR 1.60; 95% CI, 1.19 to 2.12), household deprivation (most vs least deprived quintile of households; OR 1.50; 95% CI, 1.12 to 2.02), daycare attendance (OR 1.43; 95% CI, 1.12 to 1.81) and maternal smoking (OR 1.55; 95% CI, 1.26 to 1.91). In separate analyses of Māori and Pacific children, factors associated with ID hospitalisation of Māori infants were high household deprivation (OR 2.16; 95% CI, 1.06 to 5.02) and maternal smoking (OR 1.48; 95% CI, 1.02 to 2.14); for Pacific infants, the factors included delayed immunisation (OR 1.72; 95% CI, 1.23 to 2.38), maternal experience of healthcare racism (OR 2.20; 95% CI, 1.29 to 3.70) and maternal smoking (OR 1.59; 95% CI, 1.10 to 2.29).

Comment: I found this paper really useful for Service Level Measure (SLM) discussions that are currently taking place, as it highlights where health services should focus. Interestingly, primary, secondary and maternity services play important roles in each of these areas. Interventions that address the 'maternal experience of racism in health care' factor need urgent attention.

Reference: *J Paediatr Child Health. 2017;53(3):223-31*
[Abstract](#)

Effects of the Youth Fit 4 Life physical activity/nutrition protocol on body mass index, fitness and targeted social cognitive theory variables in 9- to 12-year-olds during after-school care

Authors: Annesi JJ et al.

Summary: This US investigation assessed physiological and psychosocial variables over a 9-month period of an experimental YMCA-based after-school care programme, "Youth Fit 4 Life" (YF4L), involving 9–12-year-olds. Outcomes are reported for 86 pupils on the YF4L programme and 55 who enrolled in a typical care group for 45 min/day. YF4L is based on social cognitive theory, emphasising mastery over physical activities and the development of self-management/self-regulatory skills to support healthy behaviours. At baseline, 28% of the entire cohort were overweight or obese. At the 3- and 9-month time points, compared with typical care, YF4L was associated with significantly greater improvements from baseline in body mass index (BMI), as well as measures of self-regulation, mood, self-efficacy, cardiovascular endurance and strength. Changes in self-regulation, mood and self-efficacy significantly mediated the treatment type–BMI relationship over both 3 months ($R^2 = 0.12$; $p=0.002$) and 9 months ($R^2 = 0.13$; $p=0.001$); change in self-regulation was a significant independent mediator. Changes in BMI and self-regulation reciprocally reinforced one another. Gender did not significantly moderate those relationships.

Comment: Fantastic results and important, given the increasing number of children at after-school care with parents working/travelling.

Reference: *J Paediatr Child Health. 2017;53(4):365-73*
[Abstract](#)

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Development of a culturally tailored text message maternal health program: TextMATCH

Authors: Dobson R et al.

Summary: These researchers developed a culturally tailored text message-based maternal health programme (TextMATCH: Text for MATernal and Child Health) for Māori, Pacific, Asian, and South Asian families living in New Zealand. Over an 18-month period, TextMATCH enrolled 1,404 participants; 260 (18.52%) actively opted out at some point (after 0 to 17 months of messages). A total of 356 participants actively switched from the initial pregnancy programme to the baby programme after delivery. After 18 months of implementation, telephone interviews were conducted with 29 participants, including 6 who had withdrawn (duration of programme from 3 to 16 months). Only 2 participants reported that the programme was not useful; the remainder indicated that the messages were very useful (average rating of 4.24 out of a score of 5). All participants stated that the messages were relevant, culturally appropriate, and easy to understand. Most were happy with the specific advice and the language options provided.

Comment: The authors are well recognised for their work developing mobile phone messages that have been developed with leaders from ethnic populations, and are successful in terms of achieving equitable outcomes by ethnicity. The paper provides a good description of their methods that is useful for others wanting to design effective health messages.

Reference: *JMIR Mhealth Uhealth*. 2017;5(4):e49

[Abstract](#)

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Engaging Māori in biobanking and genomic research: a model for biobanks to guide culturally informed governance, operational, and community engagement activities

Authors: Beaton A et al.

Summary: This paper describes the development of a relationship model for biobanks, He Tangata Kei Tua, that will enable best practice by addressing Māori ethical concerns. This model is intended to guide culturally informed policy and practice for biobanks in relation to governance, operational, and community engagement activities. The model is derived from key issues of relevance to Māori, which were identified by the Te Mata Ira research project conducted in 2012–2015. Te Mata Ira identified Māori perspectives on biobanking and genetic research, and together with tikanga Māori, it developed cultural guidelines for ethical biobanking and genetic research involving biospecimens. The model draws on a foundation of mātauranga (Indigenous knowledge) and tikanga Māori (Māori protocols and practices).

Comment: Having seen the negative consequences of tissue banks and genomic research for Māori, I also recognise that Māori have the right to be fully informed about these activities, and consent to take part once informed consent is provided. As the authors suggest, there is the potential for this type of research to be leading-edge and innovative, and we don't want to perpetuate health inequities by excluding people from sharing in the benefits of genomic medicine. I'd like to see this further 'un-picked' with regard to whānau or collective consent.

Reference: *Genetics Med*. 2017;19:345-51

[Abstract](#)

Predictors of mortality in people with recent-onset gout: a prospective observational study

Authors: Vincent ZL et al.

Summary: These researchers recruited 295 patients with newly diagnosed gout disease (duration <10 years) from primary and secondary care settings and followed them for a mean 5.1 years (a total 1511 patient-years accrued). At the time of censorship, 14.6% had died (standardised mortality ratio 1.96). A reduced Cox proportional hazards model revealed that the following factors were independently associated with an increased risk of all-cause death: older age (70–80 years: HR 9.96; 80–91 years: HR 9.39), Māori or Pacific ethnicity (HR 2.48), loop diuretic use (HR 3.99), serum creatinine (per 10 μmol/L change; HR 1.04), and the presence of subcutaneous tophi (HR 2.85). The presence of subcutaneous tophi was the only baseline variable independently associated with both cardiovascular (CV) cause of death (HR 3.13) and non-CV cause of death (HR 3.48).

Comment: Further evidence as to why inequities in gout and gout management are important issues for advancing Māori health gain.

Reference: *J Rheumatol*. 2017;44(3):368-73

[Abstract](#)

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