

Māori Health Review™

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Issue 64 – 2016

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FROM THE TEAM AT


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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. 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.

Meri kirihimete me nga mihi nui o te tau hou.

Matire

Dr Matire Harwood

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Parental smoking during pregnancy: findings from the Growing Up in New Zealand cohort

Authors: Humphrey G et al.

Summary: This analysis used smoking-related data from the first wave of the Growing Up in New Zealand cohort study, i.e. from the first data-collection point during the antenatal period in 2009–10. Of the 6,822 pregnant women recruited into the study, 1,946 reported that they smoked either before pregnancy ($n=1,387$ [20.4%]) or continued to smoke during pregnancy ($n=559$ [9.9%]). These figures were higher in younger women (aged ≤ 19 years; $p<0.0001$), women who were less educated ($p<0.001$) and Māori women ($p<0.001$). Similarly, being Māori ($p<0.0001$) and being less educated ($p<0.0029$) were associated with smoking during an unplanned compared to a planned pregnancy. During pregnancy, multiparous mothers were more likely to be smokers than primiparous mothers (11% vs 8.3%). Exposure to second-hand smoke was more common for younger women (OR 3.2; 95% CI, 1.6 to 6.4), Māori women (OR 1.9; 95% CI, 1.4 to 2.5), and women with unplanned pregnancies (OR 3.4; 95% CI, 12.0 to 14.8).

Comment: The Christchurch study, another major long-term follow-up of a birth cohort in New Zealand, has provided rich information. However, this paper highlights the key strengths of the Growing Up in New Zealand study. They include the diversity of ethnicity of GUINZ participants, which means there is statistical power to analyse Māori data. In addition, the GUINZ cohort represents my community of South Auckland. The fact that it is so recent also means that it better reflects the contemporary socio-political climate, and its effects on 'growing up' in today's New Zealand.

Reference: *N Z Med J.* 2016;129(1442):60-74

[Abstract](#)

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.

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Health Independence and Caregiving in Advanced Age: Findings from LiLACS NZ

Funded by the Ministry of Health, the University of Auckland will release the report *Health Independence and Caregiving in Advanced Age: Findings from LiLACS NZ* on the 15th of December 2016. This report provides a picture of changes over time and a clearer understanding of trajectories of disability, dependency and recovery amongst people in advanced age (80 years and above).

The study found that people in advanced age are providers of care as well as receivers of care and that their quality of life in advanced age is not necessarily affected by changes in their functional status.

The project *Te Puāwaitanga O Ngā Tapuwāe 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 11 previously released LiLACS NZ reports, can be found at the University of Auckland website: <https://www.fmhs.auckland.ac.nz/assets/fmhs/faculty/liacs/research/docs/Health-Independence-and-Caregiving-in-Advanced-Age-updated031016.pdf>

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

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Exploring the maternal and infant continuum – ethnic disparities in infant hospital admissions for respiratory disease

Authors: Lawton B et al.

Summary: This Kaupapa Māori-framed cohort analysis of New Zealand public hospital maternal data linked to infant data included 54,980 births over the time period from 1995 to 2009. The primary outcome was the rate of hospitalisation for respiratory disease in the first year of life. Risk factors that were independently associated with hospitalisation included low maternal socioeconomic status (rate ratio, 1.33), smoking (1.3), parity (2.77), preterm birth (3.14; 30 vs 40 weeks), but not breastfeeding (0.99). In analyses that adjusted for risk factors, respiratory hospitalisations remained highest among infants of young Māori women (rate ratio, 1.93 at age 22.5 years) and Pacific women across all maternal age groups (rate ratios, 2.43 to 2.55), compared with infants of European women.

Comment: As the authors say, 'maternal' and 'birth' factors such as smoking, living in neighbourhoods of deprivation and preterm birth are in fact downstream factors that can be attributed to upstream, structural issues. We should be looking to give our babies the best start to life, and support whānau before and during the haputanga stage to achieve this.

Reference: *Aust N Z J Public Health.* 2016;40(5):430-5
[Abstract](#)

The recent fall in postperinatal mortality in New Zealand and the Safe Sleep programme

Authors: Mitchell EA et al.

Summary: Post-neonatal mortality in New Zealand has decreased by 29% from 2009 to 2015, reaching 2.0 deaths per 1000 live births in 2015, down from 2.8/1000 in 2009. Since 2009, the New Zealand Ministry of Health has encouraged Safe Sleep policies for application in real world conditions. This paper puts the case for these policies as contributing causes for the improvement in post-perinatal mortality outcomes. The Ministry of Health has introduced five intervention strands at different times since 2009 that aim to promote infant sleep, constituting a Safe Sleep programme that is a multimethod public health intervention:

1. An end-stage strategy to break the impasse on mortality changes
2. A 'blitz' approach to sudden unexpected death in infancy (SUDI) education to achieve alignment, consistency and scale
3. An intervention focus on preventing accidental suffocation
4. The targeted supply of infant Safe Sleep devices (ISSDs) and Safe Sleep education
5. The development of Safe Sleep policies by District Health Boards.

Over 2,600 health and community professionals each year for 4 years have participated in the SUDI education, equating to 1 participant per 23 live births. Safe Sleep leaflets have been distributed to families at more than twice the number of live births, and the number of Safe Sleep information cards designed for placement in hospital cots is approximately the number of babies born each year. In addition, over 16,500 ISSDs have been distributed to vulnerable infants. The fall since 2009 in post-neonatal mortality has been greatest for Māori and in regions with the most intensive programmes.

Comment: A timely report highlighting the impact of targeted and Māori-led interventions. As Dame Tariana Turia recently remarked though, we need to consider the way our children are described – she prefers saying we have 'valuable' or 'valued children' and not 'vulnerable children'.

Reference: *Acta Paediatr.* 2016;105(11):1312-20
[Abstract](#)

Polypill-based therapy likely to reduce ethnic inequities in use of cardiovascular preventive medications: Findings from a pragmatic randomized controlled trial

Authors: Selak V et al.

Summary: This trial randomised Māori and non-Māori primary care patients at high risk of cardiovascular disease (either because of a prior event or with an estimated 5-year risk of a first event of at least 15%) to a 'polypill' (fixed-dose combination therapy containing aspirin, statin and two antihypertensives) or usual care for a minimum of 12 months. All patients had indications for all polypill components according to their general practitioner, and all medications (including the polypill) were prescribed by the patient's general practitioner and dispensed at community pharmacies. At baseline, the use of all recommended cardiovascular preventative medications (antiplatelet, statin and two antihypertensives) was 36% (93/257) among Māori and 51% (130/156) among non-Māori participants. At 12 months, polypill-based care was associated with an increase in the use of recommended medications among both Māori (relative risk [RR] 1.87; 95% CI, 1.50 to 2.34) and non-Māori (RR 1.66; 95% CI, 1.37 to 2.00) compared with usual care. In a logistic regression analysis, the proportional effect of polypill-based care showed no significant heterogeneity by ethnicity.

Comment: Obvious bias here (I'm an author!) but I think it's important that we consider medication 'packaging' as it has significant impacts on health inequities (and therefore the potential to eliminate them).

Reference: *Eur J Prev Cardiol.* 2016;23(14):1537-45
[Abstract](#)

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Disclaimer: This publication is not intended as a replacement for regular medical education but to assist in the process. The reviews are a summarised interpretation of the published study and reflect the opinion of the writer rather than those of the research group or scientific journal. It is suggested readers review the full trial data before forming a final conclusion on its merits.

Research Review publications are intended for New Zealand health professionals.

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Consultations opened on the Health of Older People Strategy

A draft Health of Older People Strategy is out for public consultation, from 13 July through to 7 September 2016. The Ministry of Health is inviting you to provide feedback on the draft strategy, via a submission, on the online discussion forum, and through consultation meetings. The draft strategy and information on how to have your say is online, at www.health.govt.nz/hopstrategy

Your feedback is important in helping to build a strategy that prioritises the right set of actions for the health and well-being of older people in New Zealand.



Ethnic inequalities in cancer incidence and mortality: census-linked cohort studies with 87 million years of person-time follow-up

Authors: Teng AM et al.

Summary: Good evidence exists as to large and increasing ethnic and Indigenous inequalities worldwide in cancer incidence and mortality. Much of this inequality is considered to be preventable through the control of tobacco, obesity, alcohol and infectious diseases. Moreover, further gains are likely with policies addressing equal access and quality of health care. These researchers sought to determine how cancer contributes to overall ethnic gaps in all-cause mortality over time in the New Zealand population. They also examined how individual cancers contribute to the overall ethnic gaps in cancer mortality, and aimed to estimate how changes in cancer incidence contribute to trends in ethnic inequalities in mortality. New Zealand mortality and Cancer Registry data from 1981, 1986, 1991, 1996, 2001 and 2006 were probabilistically linked to 3 to 5 subsequent years of mortality (68 million person-years) and cancer registrations (87 million person-years), then weighted for linkage bias. Age-standardised rate differences (SRDs) for Māori (Indigenous) and Pacific peoples, each compared to European/Other, were decomposed by cancer type. The contribution of cancer to all-cause mortality inequalities increased (both in absolute and percentage terms) from 1981–86 to 2006–11 in Māori males (SRD 72.5 to 102.0 per 100,000) and females (SRD 72.2 to 109.4), and Pacific females (SRD -9.8 to 42.2) each compared to European/Other. Excess mortality (SRDs) increased for breast cancer in Māori females (linear trend $p < 0.01$) and prostate ($p < 0.01$) and colorectal cancers ($p < 0.01$) in Māori males. Cancers contributing to the incidence gap were generally similar to the cancers contributing to excess mortality. Breast cancer incidence increased in all ethnic groups but at a faster rate in Māori and Pacific females thus widening the incidence gap (SRD linear trend for both was $p < 0.01$). The incidence gap (SRDs) also increased for endometrial (Pacific females $p < 0.01$) and liver cancers (Māori males $p = 0.04$), while the gap decreased for cervical cancer (Māori females $p = 0.03$). Incidence of colorectal cancer increased among Māori males and females to levels similar to European/Other, thus significantly narrowing the ethnic difference that previously favoured Māori ($p < 0.01$). In the 2006–11 cohort, lung, breast and stomach cancers made the largest contribution to absolute inequalities (SRDs) in mortality among Māori and Pacific peoples, and the largest contributors to the ethnic gap in cancer incidence were lung, breast, stomach, endometrial and liver cancer.

Comment: What more can I say – significant disparities in exposure to cancer risk factors, in access to and quality of care through cancer care contribute to poor outcomes for our whānau. As the authors say, a multi-pronged approach is required.

Reference: *BMC Cancer*. 2016;16:755

[Abstract](#)



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](#)

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The association between maternal and partner experienced racial discrimination and prenatal perceived stress, prenatal and postnatal depression: findings from the Growing Up in New Zealand cohort study

Authors: Bécares L et al.

Summary: These researchers explored how mother's and partner's experiences of lifetime and past year racial discrimination impact upon prenatal and postnatal mental health among Māori, Pacific, and Asian women in New Zealand. The study data consisted of material from the first two interviews conducted with 6,822 pregnant women from the Growing Up in New Zealand cohort; 4,401 pregnant mother's partners also enrolled in the study poll. All lifetime experiences of unfair treatment were associated with increased perceived stress during pregnancy. Past year experiences of unfair treatment by a health professional and by the banking sector were associated with increased prenatal stress. Māori, Pacific, and Asian women who had ever experienced a physical attack because of their ethnicity were 86% more likely to suffer from prenatal depression than women who did not report experiencing a physical attack (OR 1.86; 95% CI, 1.13 to 3.06). Moreover, Māori, Pacific, and Asian women who reported unfair treatment in the housing sector during the past year were more than twice as likely to suffer from depressive symptoms during pregnancy than those who did not report experiencing such treatment (OR 2.10; 95% CI, 1.28 to 3.43). Postnatal depression among Māori, Pacific, and Asian women was detrimentally associated with lifetime experiences of unfair treatment by a health professional (OR 1.66; 95% CI, 1.08 to 2.55). Lifetime experiences of ethnically-motivated personal attacks and unfair treatment reported by both the mother and the partner were associated with a higher likelihood of reporting postnatal depression.

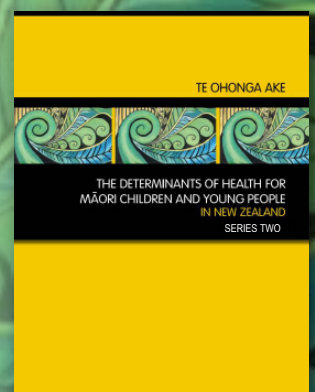
Comment: An important piece of research showing the effect that racism has on the wellbeing of new mums of Māori, Pacific and Asian ethnicity. Health research undertaken in the US on Middle-Eastern mums after 9/11 showed similar findings. Will be interesting to see whether further research is undertaken following the recent presidential election.

Reference: *Int J Equity Health*. 2016;15(1):155

[Abstract](#)

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>

Access to primary health care services for Indigenous peoples: A framework synthesis

Authors: Davy C et al.

Summary: This Australian research group sought to identify what challenges confront Indigenous peoples attempting to access appropriate mainstream primary health care services. The researchers performed a framework synthesis of 50 published papers to examine data describing issues surrounding access to (factors relating to Indigenous peoples, their families and their communities) or accessibility of Indigenous primary health care services. Twenty-four papers reported on Indigenous Health Care Services based in Australia, 15 within the USA, 4 in Canada and New Zealand, 2 in South America and 1 in Papua New Guinea. Findings were thematically analysed using Levesque and colleague's accessibility framework. They suggested that the broader health care system appeared to influence access to and acceptability of care. Funding was an obvious system issue: Indigenous health care services operated within constrained budgets resulting in a reduction of services for Indigenous peoples. The researchers also found that cultural and social determinants of health such as unemployment and low levels of education influenced patients' ability to engage with health care. Many of the Indigenous health care services addressed these issues by providing transport to and from appointments, a reduction in health care costs for people on low incomes and close consultation with community members in identifying and then addressing health care needs.

Comment: A really useful paper for funders and planners in Māori health development.

Reference: *Int J Equity Health*. 2016;15:163

[Abstract](#)

Clinical characteristics and outcomes of patients with amphetamine-associated cardiomyopathy in South Auckland, New Zealand

Authors: Kueh SA et al.

Summary: This paper describes the characteristics and outcomes of 30 patients admitted to Middlemore Hospital with heart failure and echocardiographic evidence of cardiomyopathy between 2005 and 2014 and who had a documented history of amphetamine abuse. Mean age at presentation was 40 years. The majority (n=25; 83%) were male and of Indigenous Māori ethnicity. Four patients presented with cardiogenic shock. Five patients were admitted to the intensive care unit for inotropic support and mechanical ventilation. Fifteen had severe left ventricular (LV) dilation (mean LV end-diastolic dimension 6.8 cm) and all patients had severe LV dysfunction (mean LV ejection fraction 22%). Severe LV dilation and significant LV dysfunction persisted with minimal improvement despite optimal heart failure therapy. During a median 18-month follow-up, 5 patients died from end-stage heart failure and 17 had at least one readmission with decompensated heart failure.

Comment: I recently attended a health conference in Hawaii and Professor Mau presented similar findings from a Hawaiian heart failure study. We often think of the acute and chronic mental and social health issues of methamphetamine – this research highlights the health effects of it on our young Indigenous men and women.

Reference: *Heart Lung Circ*. 2016;25(11):1087-93

[Abstract](#)

Knowledge and beliefs about nutrition and physical activity during pregnancy in women from South Auckland region, New Zealand

Authors: Okesene-Gafa K et al.

Summary: Results are reported from a nutritional questionnaire completed by 422 South Auckland women during late pregnancy. Participants reported ethnicity as Māori (24.2%), Pacific (40.5%), Asian (12.8%) and European/Others (21.8%). Most (95.0%) reported receiving information about healthy eating while pregnant and 61% reported eating healthy foods frequently or very frequently. Nearly half (44.3%) reported eating more in pregnancy; the commonest reasons were cravings and 'eating for two'. In a multivariable logistic regression analysis adjusting for ethnicity and gestation, the self-reported factors associated with infrequent healthy eating in this sample were Māori (adjusted OR 17.66; 95% CI, 8.49 to 36.77) and Pacific ethnicity (aOR 14.54; 95% CI, 7.32 to 28.88); parity ≥ 3 (aOR 2.09; 95% CI, 1.26 to 3.48); obesity (aOR 2.84; 95% CI, 1.35 to 5.97); unplanned pregnancy (aOR 1.95; 95% CI, 1.18 to 3.22); and eating takeaways ≥ 3 times/week (aOR 4.46; 95% CI, 1.88 to 10.56). The majority (83.4%) of the sample stated that they would likely/very likely participate in a nutritional intervention.

Comment: Obesity during pregnancy is a serious health issue for both mum and pēpi. It is a difficult subject to discuss with mums; conversations must occur in ways that don't make them feel further marginalised or stigmatised. The researchers, having recognised the sensitivities, are doing a great job in trying to address and manage it.

Reference: *Aust N Z J Obstet Gynaecol*. 2016;56(5):471-83

[Abstract](#)

Impact of prescription charges on people living in poverty: A qualitative study

Authors: Norris P et al.

Summary: This research was conducted by the School of Pharmacy, University of Otago, and explored the lived experience of 29 low-income people who struggle to pay prescription charges. The participants were recruited through organisations that provide services entirely or predominantly to low-income persons. All took part in semi-structured interviews. Approximately half of the cohort was Māori. Participants reported having to make difficult decisions when collecting their prescription medicines, such as selecting some medicines and leaving others, choosing medicines for mental health rather than physical health; cutting food consumption or eating less healthy food so as to pay for medicines; or collecting medicines for children and leaving those for adults. Participants also reported using strategies such as reducing doses to make prescriptions last longer and delaying picking up medicines; practices that result in suboptimal dosing or interrupted treatment.

Comment: As a GP in a very low cost access practice, I regularly see whānau coping with these difficult yet necessary decisions. The evidence, published here for all to see, is not only a useful resource but gives me hope that people are impassioned and committed to supporting Indigenous health care in ways that are non-victim blaming.

Reference: *Res Social Adm Pharm*. 2016;12(6):893-902

[Abstract](#)

Patterns of privilege: A total cohort analysis of admission and academic outcomes for Māori, Pacific and non-Māori non-Pacific health professional students

Authors: Wikaire E et al.

Summary: This paper sought to determine the reasons for academic inequities experienced by Māori and Pacific health professional students attending the University of Auckland in 2002–2012. Using Kaupapa Māori methodology, the researchers analysed data for 2686 health professional students. Māori and Pacific students were more likely than non-Māori non-Pacific (nMnP) students to attend low-decile schools (27% Māori, 33% Pacific vs 5% nMnP; $p < 0.01$), complete bridging foundation programmes (43% Māori, 50% Pacific vs 5% nMnP; $p < 0.01$), and have lower secondary school results (Rank Score 197 Māori, 178 Pacific vs 231 nMnP; $p < 0.01$). Moreover, nMnP students achieved a higher first-year grade point average (GPA) (3.6 Māori, 2.8 Pacific vs 4.7 nMnP; $p < 0.01$), were more likely to pass all first-year courses (61% Māori, 41% Pacific vs 78% nMnP; $p < 0.01$), to graduate from the intended programme (66% Māori, 69% Pacific vs 78% nMnP; $p < 0.01$), and to achieve optimal completion (9% Māori, 2% Pacific vs 20% nMnP; $p < 0.01$) compared with Māori and Pacific students.

Comment: This paper was well received at the recent Ngā Pae o te Māramatanga conference, not only for the results and recommendations, but also for the robust methodology. A great example of the power of statistical Kaupapa Māori research.

Reference: *BMC Med Educ*. 2016;16(1):262

[Abstract](#)

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