

Māori Health REVIEW™

Making Education Easy

Issue 92– 2021

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Welcome to the 92nd issue of Māori Health Review.

In this issue, we highlight the high prevalence of adverse childhood experiences in New Zealand, and the association with exposure to violence in adulthood. We also feature robust studies showing ethnically disparate outcomes for acute rheumatic fever and childhood asthma. Finally, we present recommendations to assist in the equitable and effective implementation of human papillomavirus self-testing.

We hope you find this issue informative and of value in your daily practice. We welcome your comments and feedback. Nga mihi

Dr Matire Harwood

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Ethnically Disparate Disease Progression and Outcomes among Acute Rheumatic Fever Patients in New Zealand

Authors: Oliver J et al.

Summary: A retrospective analysis of 2182 patients aged <40 years who were hospitalised in New Zealand for acute rheumatic fever between 1989 and 2012 found that 13.6% had experienced progression to recurrent acute rheumatic fever, rheumatic heart disease or circulatory death by the end of 2015. After 26.8 years of theoretical follow-up, the probability of disease progression from acute rheumatic fever was 24% and the probability of death was 1%. However, progression occurred sooner and was more than twice as likely in Māori or Pasifika patients. Only 17.8% of 435 patients with rheumatic heart disease had previously been hospitalised for acute rheumatic fever. The authors argue that a national patient register could help to monitor, prevent and reduce acute rheumatic fever progression.

Comment: As identified here, there are inequities along the path of rheumatic heart disease, including differences in rates of risk factors, heart disease and then its progression. Many have called on the government to fund a national register for patients, and to support development of a national prevention and control strategy in order to address these inequities and put an end to what is described as a 'third world disease' - see [Bennett J, et al. NZ Med J. 2021 May 21;134\(1534\):93-95.](#)

Reference: *Emerg Infect Dis.* 2021;27(7):1893–902

[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.



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Prevalence and predictors of psychological distress following injury

Authors: Richardson AE et al.

Summary: Distress is common after injury among people with a broad range of injury types and severities, according to findings from a New Zealand longitudinal cohort study. A total of 2856 study participants were recruited from a national insurance claims register, and were interviewed approximately 3, 12, and 24 months after their injury. The Kessler Psychological Distress Scale (K6) was used to measure psychological distress at each interview. Clinically relevant distress (K6 score ≥ 8) was reported in 25% of participants at 3 months post-injury, in 15% at 12 months, and in 16% at 24 months. Independent risk factors for clinically relevant distress at 12 months included age ≥ 45 years, Māori or Pacific ethnicity, pre-injury mental health conditions, inadequate pre-injury income, poor pre-injury health or trouble accessing healthcare, severe injury or injury resulting from assault, and clinically relevant distress at 3 months post-injury. The majority of these risk factors also applied to distress at 24 months post-injury. The authors conclude that screening for distress early after injury is important to identify individuals in need of targeted support.

Comment: I've not seen the K6 being administered routinely after serious injury – and so may consider using it in my practice. However, clinical pathways to support clinicians, people in distress and their whānau, to safely manage distress would also be useful.

Reference: *Inj Epidemiol.* 2021;8(1):41

[Abstract](#)

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Glycaemic control across the lifespan in a cohort of New Zealand patients with type 1 diabetes mellitus

Authors: Chepulis L et al.

Summary: A retrospective review of clinical records from the Waikato Regional Diabetes Database in December 2017 concluded that poor glycaemic control in patients with type 1 diabetes mellitus was likely due to inequities in healthcare, including reduced access to insulin pump therapy. A total of 1303 patient records were examined, and glycaemic control was determined by the most recent glycosylated haemoglobin (HbA1c) reading in the past 2 years. Median HbA1c was 67 mmol/mol (8.3%), and was above the recommended range in 85.3% of patients. When analysed according to age, median HbA1c was highest in patients aged 15–29 years. Patients on insulin pump therapy had lower median HbA1c than those receiving multiple daily injections (63 mmol/mol [7.9%] versus 69 mmol/mol [8.5%]; $p < 0.001$). Insulin pumps were significantly less likely to be used by Māori ($p = 0.003$) and men ($p < 0.0001$). Worsening glycaemic control was associated with increasing social deprivation ($p < 0.001$) but not with rural/urban living.

Comment: The few people I know with type 1 diabetes mellitus tell me that new technologies, such as e-testing and insulin pumps, are both life-changing and expensive. This study demonstrates inequitable access to these interventions by ethnicity and 'deprivation' status, with potential impact on clinical outcomes. We must advocate for equitable access to new, effective interventions.

Reference: *Intern Med J.* 2021;51(5):725-731

[Abstract](#)

Recommendations for implementing HPV self-testing in Aotearoa

Authors: Bartholomew K et al.

Summary: Researchers have made recommendations as to how the Government can most equitably and effectively implement rollout of human papillomavirus (HPV) self-testing. These include: Ensure centralisation of equity, specifically Māori health equity; Focus on equity in follow-up, colposcopy and treatment; Remove current data-related barriers to equitable access to screening; Ensure that the new IT system is population-based; Review the place of cervical screening in the broader context of women's health in general practice; Plan for an 'on-request' service of mailed self-testing kits; Ensure positive result triage/follow-up pathways are risk-stratified, patient-centred and have an equity lens applied; Develop and implement an education package for healthcare providers before the self-testing rollout; Create simple and culturally appropriate resources for patients explaining how to take a self-test; and initiate a communications strategy to manage public expectations.

Comment: As the authors say, a welcome announcement regarding the roll-out of this much-needed test. There are really useful tips here on how we can work together to ensure that ALL women have both access to the test and evidence-based management.

Reference: *N Z Med J.* 2021;134(1535):11-16

[Abstract](#)

Predictors of medicinal cannabis users' willingness to utilise a new prescription Medicinal Cannabis Scheme in New Zealand

Authors: Rychert M et al.

Summary: A 2019 online survey of 3634 medicinal cannabis users has identified factors predictive of intention to engage with the new prescription Medicinal Cannabis Scheme (MCS) in New Zealand. A total of 78% of respondents were aware of the new MCS and 66% intended to use it. On logistic regression analysis, higher income (odds ratio [OR] 1.57), younger age (OR 1.02), smoking cannabis versus vaping (OR 2.0), and oral ingestion in edible form (OR 2.22) predicted intention to engage with the MCS. Those less likely to engage with the MCS were Māori (OR 0.63) and those who grew their own cannabis (OR 0.52). The authors speculated that lower intended engagement by Māori, lower income groups and those who grow their own cannabis may reflect perceptions of the MCS as restrictive and expensive.

Comment: I had an interesting conversation with someone last week about stopping smoking in order to improve his respiratory symptoms. He admitted that he was smoking a joint a day to help with pain management. We calculated that the cost was \$300/month, which was comparable to MCS. My point being that we shouldn't make assumptions and people may be open to consider MCS.

Reference: *N Z Med J.* 2021;134(1534):66-75

[Abstract](#)

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Adverse childhood experiences in New Zealand and subsequent victimization in adulthood

Authors: Fanslow J et al.

Summary: The first comprehensive assessment of adverse childhood experiences in New Zealand has suggested that prevention of childhood trauma, maltreatment, and family dysfunction remain important public health goals to support the wellbeing of children and adults. In this population-based study, 2887 (1464 female, 1423 male) participants were surveyed in 2019. At least one adverse childhood experience was reported by 55% of respondents before the age of 18 years, and 11.6% reported at least four experiences. A higher prevalence of adverse childhood experiences was reported by respondents who were younger, had lower socioeconomic status, and who identified as Māori. On multivariate regression analysis, exposure to any adverse childhood experience was significantly associated with later exposure to intimate partner violence and non-partner violence.

Comment: A really important study, confirming the need to focus on improving the environment in which our tamariki and tai tamariki grow and flourish.

Reference: *Child Abuse Negl.* 2021;117:105067

[Abstract](#)

Childhood asthma in New Zealand: the impact of on-going socioeconomic disadvantage

Authors: Schlichting D et al.

Summary: Many New Zealand children, particularly Māori children and those living in areas of high deprivation, are not receiving adequate primary care for asthma, according to a large analysis of asthma hospital admissions and asthma prescriptions. The analysis included 39,731 hospitalisations with asthma as a discharge diagnosis and 5,512,856 prescriptions for asthma medication in children ≤ 14 years old. There was a 45% reduction in the number of asthma hospitalisations and an 18% reduction in prescriptions attributable to asthma between 2010 and 2019. Both Māori and non-Māori children showed reductions. However, hospitalisations for asthma occurred twice as frequently in Māori children compared with non-Māori children (7.2 per 1000 vs 3.5 per 1000, $p < 0.001$), and asthma readmission within 90 days of the first admission was also more common (18% vs 14% in non-Māori children, $p < 0.001$). Children from families living in the highest deprivation areas had asthma admission rates that were, on average, 2.8 times higher than children living in the least deprived areas. The combined cost of asthma hospitalisations and prescriptions was estimated at NZD 165 million, including 103 million for hospital admissions and 62 million for prescriptions.

Comment: Being the pessimistic optimist that I am, it's great to see asthma hospitalisations and severity improving for Māori and non-Māori over time (perhaps thanks to better clinical management and use of guidelines – see https://www.nzrespiratoryguidelines.co.nz/uploads/8/3/0/1/83014052/arf_nz_child_asthma_guidelines_update_30.6.20.pdf). However, those wider social determinants – poverty and poor housing – continue to contribute to inequities.

Reference: *N Z Med J.* 2021;134(1533):80-95

[Abstract](#)

Inequity in outcomes from New Zealand chronic pain services

Authors: Lewis GN et al.

Summary: An analysis of 4876 patients who received treatment for chronic pain in New Zealand between 2014 and 2019 has highlighted ethnic disparities in outcomes. Clinical questionnaires used for patient assessment included the Brief Pain Inventory (BPI), the Depression, Anxiety and Stress Scale – 21 items (DASS-21), the Pain Catastrophising Scale (PCS); and the Pain Self-Efficacy Questionnaire (PSEQ). At treatment end, Pasifika patients had significantly poorer scores compared with Europeans on several DASS-21 and PCS subscales, while there were no differences between European, Māori and Asian ethnicities. At 3- to 6-month follow-up, Māori patients had poorer scores on almost all outcome measures compared with European patients, while Asian and Pasifika patients had poorer scores on several of the DASS-21 and PCS subscales. The authors suggest that the cultural safety of chronic pain clinics should be reviewed regarding both assessment and management procedures.

Comment: Having identified inequities in outcomes following treatment in a chronic pain service, some would spend more time trying to better understand the potential patient, service and system factors. It's refreshing to see that the authors have jumped right in to focus on what they know and can address – the efficacy, quality and cultural safety of the service itself.

Reference: *N Z Med J.* 2021;134(1533):11-20

[Abstract](#)

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He Wānanga Whakarite: preparing Māori for surgical selection interviews

Authors: Nicholls L et al.

Summary: An independent kaupapa Māori wānanga initiative has been developed to support and prepare Māori Non-Training Surgical Registrars for the Royal Australasian College of Surgeons Surgical Education and Training (SET) interviews. The initiative seeks to address inequity in the surgical workforce in New Zealand. To date, attendees of the wānanga have unanimously agreed that it dramatically improved their preparation for SET interviews. In 2020, 80% of wānanga attendees were selected for SET training positions.

Comment: A fantastic initiative, demonstrating great results. I understand that further work is underway to make the surgical training and working environments safer for the Māori workforce too.

Reference: *ANZ J Surg.* 2021;91(6):1143-1147

[Abstract](#)

Implementation effectiveness of health interventions with Māori communities

Authors: Harding T & Oetzel J.

Summary: A cross-sectional survey of 200 health professionals has highlighted factors regarded as crucial to the implementation effectiveness of health interventions in Māori communities. Four levels of importance for implementation effectiveness were determined by paired sample t-tests, with teamwork and community autonomy the most important. Experience with a previous health intervention in Māori communities was reported by 24% of participants. On multivariate regression analysis, the key overall factors associated with participants' rating of implementation effectiveness were process ($p < 0.01$) and community ($p < 0.05$).

Comment: These findings should be used in development of the community/locality-driven approach of the new health system reforms. For those interested in more, the Healthier Lives National Science Challenge have funded further mahi – see <https://healthierlives.co.nz/new-project-to-support-health-system-change-in-aotearoa-new-zealand/>.

Reference: *Aust NZ J Public Health.* 2021;45(3):203-209

[Abstract](#)

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