

Māori Health

REVIEW™ Arotake Hauora Māori



Making Education Easy

Issue 106 – 2023

In this issue:

- Cannabis and methamphetamine use in New Zealand
- Equity-focused implementation theories, models and frameworks
- Reflections on the Prospective Outcomes of Injury Study
- Medication adherence in Māori vs non-Māori with heart failure
- Childhood cancer incidence and survival
- Cardioprotective medication in peripheral artery disease
- Indigenous food sources, pathogenic bacteria and antibiotic resistance
- Spatial variation in immunisation coverage for pregnant women
- Interventions to improve immunisation coverage of pregnant women
- Perceptions and experiences of early childhood healthcare among ethnically diverse caregivers
- Non-traumatic dental presentations at the emergency department

KINDLY SUPPORTED BY



Tēnā koutou katoa

Nau mai, haere mai ki a Māori Health Review. We aim to bring you top Māori and Indigenous health research from Aotearoa and internationally. Ngā mihi nui ki Manatu Hauora Māori for sponsoring this review, which comes to you every two months. Ko te manu e kai i te miro nōna te ngahere, Ko te manu kai i te mātauranga, nōna te ao.

Welcome to the 106th issue of Māori Health Review.

In this issue, we include two studies examining maternal immunisation in pregnant women, highlighting both spatial variation in coverage and intervention strategies to improve coverage. We present a paper showing clear differences in medication adherence between Māori and non-Māori with heart failure. Finally, we provide a positive reflection of the Prospective Outcomes of Injury Study, and its impact on health policy.

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

Ngā mihi

Associate Professor Matire Harwood

matire@maorihealthreview.co.nz

Cannabis and methamphetamine in New Zealand: a Kaupapa Māori literature review

Author: Wikaire E and Doherty TH

Summary: Future research on cannabis and methamphetamine use in New Zealand must make an explicit commitment to be of benefit to Māori, and implement Kaupapa Māori-consistent research approaches. This was the finding of a Kaupapa Māori review which analysed 30 literature sources, the majority of which were journal articles. Research mainly utilised quantitative survey data collection methods, focused on large population groups and investigated individual characteristics of cannabis and/or methamphetamine users. A general population approach was taken in most articles, with Māori only briefly mentioned, or differences in drug use assessed between Māori and others. The value of focusing on drug use, rather than drug users, was highlighted in more recent research either led by Māori or undertaken with a critical lens.

Comment: An excellent, and timely, review of the literature on this topic. I think a Kaupapa Māori approach to relevant legislation, to ensure adequate consultation and due consideration to its impacts, is also critical here (e.g. legalising cannabis and now the re-introduction of pseudoephedrine).

Reference: *N Z Med J. 2023;136(1584):73-83.*

[Abstract](#)

[CLICK HERE](#) to read previous issues of Māori Health Review

Independent commentary by Associate Professor Matire Harwood Ngāpuhi



Matire (MBChB, PhD) is a hauora Māori academic and GP dividing her time across the Department of General Practice and Primary Care at Auckland medical school, where she is HoD, and Papakura Marae Health Clinic in South Auckland. She has served on a number of Boards and Advisory Committees including Waitemātā DHB, Health Research Council, ACC (Health Services advisory group), COVID-19 TAG at Ministry of Health and the Steering Committee for the appointment of Te Aka Whai Ora.

In 2017 she was awarded the L'Oréal UNESCO New Zealand 'For Women In Science Fellowship' for research in Indigenous health, in 2019 she received the Health Research Council's Te Tohu Rapuora award for leadership in research to improve Māori health and in 2022 she received the College of GPs Community Service Medal.

A scoping review of equity-focused implementation theories, models and frameworks in healthcare and their application in addressing ethnicity-related health inequities

Author: Gustafson P et al.

Summary: A review of implementation science theories, models and frameworks (TMFs) may be used as a guide to TMF selection and to illustrate how TMFs have been used in equity-focused implementation activities. A total of 26 papers describing 15 TMFs and their operationalisation were included from analysis of literature published between January 2011 and April 2022. TMFs were categorised as determinant frameworks (n = 4), implementation theories (n = 1), process models (n = 6) and evaluation frameworks (n = 3). One framework contained elements of determinant, process and evaluation and was therefore classified as a 'hybrid' framework. An equity focus was present in 12 TMFs, and three were established TMFs applied in an equity context. Systems-level factors were at least partially considered in all TMFs, with macro-, meso- and micro-level influences on equity and implementation fully considered in five.

Comment: Really useful reference for grant applications, especially when thinking about how to make our research 'translatable' or, even better, transformative!

Reference: *Implement Sci.* 2023;18(1):51.

[Abstract](#)

New Zealand Research Review subscribers can claim CPD/CME points for time spent reading our reviews from a wide range of local medical and nursing colleges. Find out more on our [CPD page](#).

Do you have whānau and friends who should be receiving Māori Health Review, but they aren't health professionals?

Just send them to www.maorihealthreview.co.nz and they can sign up to get the review sent directly to their inbox.

Reflections on the Prospective Outcomes of Injury Study (POIS; 2006-2023): how population-based research can address Māori outcomes and governance

Author: Wyeth EH and Derrett S

Summary: The Prospective Outcomes of Injury Study (POIS) has influenced Accident Compensation Corporation (ACC) research strategy and outcomes focus, according to researchers from the Ngāi Tahu Māori Health Research Unit at Otago University, Dunedin. The study has provided disability, health, and wellbeing outcomes knowledge that was previously unavailable, especially for Māori, they noted. POIS recruited 2856 injured New Zealanders with an ACC entitlement claim between 2007 and 2009, of whom 20% were Māori. Detailed information was shared by participants (at 3, 12 and 24 months, and 12 years post-injury) regarding injury, socio-demographics, health, health services access, employment and wellbeing. In-depth interviews were also undertaken, and administrative data about injury-related hospitalisations, the sentinel injury and subsequent injuries were collected.

Comment: This reads as a reflection on undertaking Kaupapa Māori health research – the wider impacts on leadership and policy development, improvements to data collection, storage and analysis, but also how there is so much to do with tight timelines, budgets, and reporting requirements. How do we capture the relevant yet often ignored benefits of Kaupapa Māori research?

Reference: *Front Res Metr Anal.* 2023;8:1212827.

[Abstract](#)

RACP MyCPD Program participants

can claim the time spent reading and evaluating research reviews as CPD in the online [MyCPD program](#).

Please contact MyCPD@racp.edu.au for any assistance.

Shining a light on the development of Pae Tū: Hauora Māori Strategy

Over February and March 2023, Manatū Hauora and Te Aka Whai Ora delivered a series of two-day wānanga across Aotearoa to inform the development of our Pae Ora | Healthy Futures strategies, particularly [Pae Tū: Hauora Māori Strategy](#).

Both agencies met kanohi ki te kanohi with iwi, hapū, whānau, and the Māori health sector in Whangārei, Kirikiriroa, Te Whanganui-a-Tara, and Ōtepoti. More than 400 people attended.

After the wānanga, Manatū Hauora and Te Aka Whai Ora worked together to develop Pae Tū: Hauora Māori Strategy and the other rautaki released as part of the suite of [Pae Ora strategies](#). These were launched in July 2023 by our Ministers.

The release of the Pae Ora strategies marked a significant milestone on our health reforms journey. In acknowledging those strategies, it's important we recognise the contributions of the many people who supported their development.

To give visibility to those people and to our engagement process, Manatū Hauora has released Ngā Wānanga Pae Ora 2023: Summary Report. You can read this online [here](#).

This new report provides an overview of our wānanga with the Māori health sector and communities, and summarises the key themes, priorities, and reflections shared. It reflects our commitment to working with our stakeholders, partners, and audiences to deliver strategies that honour their voices and help to achieve their aspirations.

This is the continuation of a long journey in Māori health. It builds on the foundations laid in engagement for He Korowai Oranga, Whakamaua, and Hui Whakaoranga.



Utility of big data to explore medication adherence in Māori and Non-Māori community-dwelling older adults with heart failure in Aotearoa New Zealand

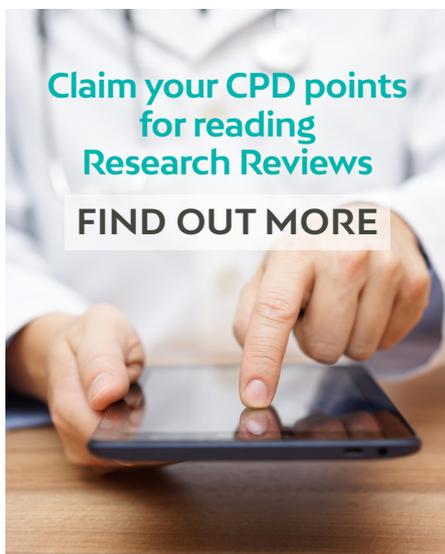
Author: Hikaka J et al.

Summary: A national cross-sectional study has highlighted significant disparity between Māori and non-Māori in medication adherence for heart failure. The study included 13,743 assessments for older community-dwelling adults with heart failure, including 1526 in Māori, between 2012 and 2019. Mean participant age was 74.5 years for Māori and 82.3 years for non-Māori. A total of 21.8% of those in the Māori cohort did not adhere fully to their medication regimen, compared with 12.8% of those in the non-Māori cohort. The adjusted prevalence ratio for medication non-adherence in Māori vs non-Māori was 1.53 (95% CI 1.36-1.73). The study authors noted that their results are transferable to other countries, allowing the identification of underserved ethnic groups for which culturally appropriate interventions can be targeted.

Comment: I'm working with a team of Māori and Pacific researchers (<https://www.manawafatu.org/>) on hospital discharge 'activities' for Māori and Pacific people with heart failure. Preliminary results suggest it's not so much an issue of being 'appropriate' as being clinically and culturally unsafe. Discharge letters are confusing and inconsistent, patients are told to see their GP but can't afford/access GPs in time, management plans don't suit peoples' lives/contexts and people are becoming more unwell and dying as a result. Dr Sandra Hanchard is leading work to resolve this – please contact her if you are interested in knowing more.

Reference: *Drugs Aging.* 2023;40(9):847-855.

[Abstract](#)



Childhood cancer incidence & survival in Aotearoa, New Zealand 2010-2019

Author: Pugh G et al.

Summary: While childhood cancer incidence and survival rates in New Zealand remain comparable with other high-income countries, 5-year survival is lower in Māori and Pacific peoples compared with non-Māori. This was the finding of a study involving 1522 children aged <15 years, diagnosed with cancer between 2010 and 2019. The age-standardised incidence of cancer was 169.1 (95% confidence interval [CI] 157.0-181.2) per million per year, and the overall 5-year survival rate was 85.6% (95% CI 83.7-87.3). When analysed according to ethnicity, 5-year survival rate was 80.9% (95% CI 76.5-84.6) for Māori, 82.6% (95% CI 75.6-87.7) for Pacific peoples and 87.8% (95% CI 85.6-89.7) for non-Māori. Differences in survival were most marked among children aged 1-14 years at diagnosis in both adjusted and unadjusted models.

Comment: The authors call for further research to “understand the survival differences” but I wonder if we already know enough about causes (differential exposure to the wider determinants of wellbeing including poverty, differences in access to and quality of care through health systems for tamariki and tai tamariki Māori) and should now focus on solutions. Some evidence-based and best-practice examples – more Māori doctors and health workers, cutting tobacco and vaping exposure, eliminating child poverty.

Reference: *Cancer Epidemiol.* 2023;86:102433.

[Abstract](#)

The prescribing of cardioprotective medications and the impact on survival for patients with peripheral artery disease that undergo intervention

Author: Hart O et al.

Summary: A study of cardioprotective medication prescribing in patients with peripheral artery disease (PAD) has highlighted areas of deficiency, namely for women and Māori men. The study assessed 2547 patients who had undergone PAD-related percutaneous and surgical intervention between 2010 and 2021 in the Midland region of New Zealand. Overall, 80.7% of patients received a prescription for antihypertensive medication, 77.4% for lipid-lowering medication and 89.9% for antithrombotic medication. Patients with concomitant ischaemic heart disease were more likely to be prescribed cardioprotective medication. Women were less likely to be prescribed lipid-lowering medication than men, while Māori men were less likely to be prescribed antiplatelet medication compared with non-Māori men. Lipid-lowering and antiplatelet medication showed a survival advantage on univariate analysis, while antihypertensive and anticoagulant medication did not. Best medical therapy was associated with better survival after adjustment for age, sex, end stage renal failure and presence of chronic limb-threatening ischaemia (hazard ratio 0.88, 95% CI 0.79-0.98).

Comment: So best practice medical treatment was associated with better survival, yet was not prescribed for Māori men over the last decade.

Reference: *ANZ J Surg.* 2023;93(10): 2376-2381.

[Abstract](#)

Indigenous food sources as vectors of *Escherichia coli* and antibiotic resistance

Author: van Hamelsveld S et al.

Summary: There is a need to limit or reduce human pathogenic bacteria where wild food is gathered, with shellfish able to promote dissemination of antibiotic resistance. These were the findings of a survey of *Escherichia coli* (*E. coli*) and antibiotic resistance in aquatic foods and water in North Canterbury. Antibiotic-resistant bacteria were found on watercress (*Nasturtium officinale*) and cockles (*Austrovenus stutchburyi*). Greenshell/lip mussels (*Perna canaliculus*) kept in a tank with environmentally relevant concentrations of *E. coli* were colonised to levels considered unsafe for human consumption within 24 hours. Measurement of horizontal gene transfer between bacteria within the mussels showed that transmission frequency of plasmid RP4 was significantly higher in mussels than in water alone.

Comment: Canterbury researchers and Kai Tahu are leading the way in terms of protecting wai and for the wellbeing of people, and vice versa. Importantly they don't blame the kai collection but instead focus on strategies to reduce harm to the water, the kai, matauranga Māori (traditional collection) and us.

Reference: *Environ Pollut.* 2023;334:122155.

[Abstract](#)

Examining spatial variation for immunisation coverage in pregnant women

Author: Hobbs M et al.

Summary: A nationwide study of all pregnant women who delivered between 2013 and 2020 found suboptimal maternal immunisation coverage, with significant spatio-temporal variation and clustering in coverage. The study determined receipt of the influenza or pertussis vaccine using any one of three relevant national databases (National Immunisation Register, Proclaims, Pharmaceutical collection) during the eligible pregnancy. Maximal maternal immunisation coverage was around 50% in the best performing regions, meaning approximately 183,737 pregnant women were not protected. The authors noted that their study was one of the first to examine spatial variation in maternal immunisation coverage in pregnant women at a national level over space and time, and provides tools to measure the impact of interventions aimed at improving immunisation coverage.

Reference: *Soc Sci Med.* 2023;335:116228.

[Abstract](#)

Interventions to improve vaccine coverage of pregnant women in Aotearoa New Zealand

Author: Macredie F et al.

Summary: Healthcare professionals need to proactively engage with pregnant women regarding maternal immunisation and collaborate in service delivery, according to a survey of individuals from the vaccination workforce. Interview participants (n = 6) were involved in education, certification and supporting vaccinators, high-level strategising, and vaccination. They noted that interventions must emphasise the importance of maternal immunisation, promote collaboration and innovation, make interventions accessible, and empower Māori- and Pacific-driven avenues to vaccination. Participants identified the importance of building and maintaining trust, and affording women time and autonomy in vaccination.

Reference: *J Prim Health Care.* 2023;15(3):230-237.

[Abstract](#)

Comment: Two great papers providing practical information for clinicians and services who aspire to protect hapu māma equitably.

“I haven’t even taken them to the doctors, because I have that fear of what to expect”: a qualitative description study exploring perceptions and experiences of early childhood healthcare among ethnically diverse caregivers in Aotearoa New Zealand

Author: Charania NA et al.

Summary: Ensuring trusting relationships and positive health encounters for ethnically diverse caregivers of preschool children requires a non-judgemental, competent, and culturally sensitive approach by healthcare professionals and services. This was the finding of a qualitative study of 145 caregivers who identified as Māori, Pacific, Asian and/or European. Caregivers relied on multiple sources of health information, in particular trusting providers or other caregivers who had children. They were often disappointed that health providers did not build trusting relationships to support positive experiences. Caregivers often felt judged by providers when accessing care and felt pressure to conform. They were frustrated by slowness and fragmentation of the health system. Caregivers had to be proactive and assertive to ensure their child received care amidst numerous barriers, including discrimination and bias. Policies are required to alleviate the indirect costs of accessing healthcare, prioritising of whānau/family-centred care, and addressing pervasive racism and bias within the healthcare system, the study authors concluded.

Comment: An excellent piece of research from this team. Reading it reminded me of a nursing colleague’s experience with her child who had multiple health and disability hospital admissions. Her amazing ability to ‘navigate complexity’ was recorded as ‘over-demanding mother’ in the ‘Disease Classifications’ section.

Reference: *Lancet Reg Health West Pac.* 2023;40:100882.

[Abstract](#)

A retrospective observational study of the management of non-traumatic dental presentations at a tertiary centre in New Zealand: a Choosing Wisely approach

Author: Fisher C et al.

Summary: Non-traumatic dental presentations (NTDPs) may receive suboptimal care in emergency departments (EDs), according to a study of presentations to the Christchurch Hospital ED in 2020. A total of 931 individuals with dental pain or dental abscesses were included, with over-representation of young adults, Māori, Pacific peoples and those living in high-deprivation areas. An orthopantomogram was performed in 37% of patients, and was considered low value in 24% of cases. Of patients managed by ED staff who were not referred to specialist dental services, 42% were prescribed antibiotics, of whom only half had facial swelling, and 71% were prescribed analgesia, including an opiate in 78% of cases. Definitive treatment was given in fewer than 20% of NTDPs. Continuing to provide care for NTDPs in the ED setting may increase healthcare costs and contribute to poor opioid and antimicrobial stewardship, the study authors concluded.

Comment: Further evidence to keep oral health (and disease prevention including smoking cessation) on the health agenda!

Reference: *N Z Med J.* 2023;136(1582):14-27.

[Abstract](#)



Research Review publications, videos and e-Learning modules have been endorsed by The Royal New Zealand College of General Practitioners (RNZCGP) and have been approved for up to **1 CME** credit per learning hour for Continuing Professional Development (CPD) purposes. Please [CLICK HERE](#) to download RNZCGP Dashboard.



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 Content: The selection of articles and writing of summaries and commentary in this publication is completely independent of the advertisers/sponsors and their products.

Privacy Policy: Research Review will record your email details on a secure database and will not release them to anyone without your prior approval. Research Review and you have the right to inspect, update or delete your details at any time.

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.

MERRY CHRISTMAS &
A HEALTHY, HAPPY 2024!

FROM THE TEAM AT

