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#### **Welcome** to the 113th issue of Māori Health Review.

Ka tangi te tītī, ka tangi te kākā, ka tangi hoki ahau, tihei mauri ora!

Māori Health Review wishes to acknowledge the passing of Dame Tariana Turia this month and her leadership in Hauora Māori. Her leadership in Whānau Ora was often spoken about at her tangi, but Dame Tariana was also a strong champion of health workforce development, led tobacco control policies, and ensured funding to drive equity in rheumatic heart disease and bariatric surgery.

E te mareikura, moe mai i te aroha.

In this issue, we include two studies highlighting the increased risk and long-term consequences of gestational diabetes in wāhine Māori. We report findings from a study looking at financial barriers to primary health care. Finally, we review the process of development for decentralised cancer clinical trial methodology in New Zealand. We hope you find this issue informative and of value in your daily practice. We welcome your comments and feedback

Ngā mihi

#### **Professor Matire Harwood**

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### Tobacco endgame intervention impacts on health gains and Māori : non-Māori health inequity

Author: Ait Ouakrim D et al.

**Summary:** A modelling study has found that the Aoteoroa/New Zealand Tobacco Action Plan could deliver large health benefits and dramatically reduce health inequities between Māori and non-Māori. The Action Plan involves: 1) legislating for de-nicotinisation of retail tobacco; 2) a 95% reduction in retail outlets; and 3) people born after 2005 being unable to legally purchase tobacco. A Markov model was used to estimate future yearly smoking and vaping prevalence, along with mortality and health-adjusted life years (HALYs). The full Action Plan (plus media promotion) would reduce adult smoking prevalence from 31.8% in 2022 to 7.3% in 2025 for Māori, and from 11.8% to 2.7% for non-Māori. The target smoking prevalence of 5% was forecast to be achieved in 2026 for Māori males and in 2027 for Māori females. The HALYs gain for the full Action Plan over the population's remaining lifespan were estimated to be 594,000, with de-nicotinisation alone achieving 97% of these HALYs. The full Action Plan was forecast to reduce the gap between Māori and non-Māori all-cause mortality for people aged at least 45 years by 22.9% among females and 9.6% among males by 2040.

**Comment:** In memory of Dame Tariana and her smokefree mahi.

Reference: Tob Control. 2024;33(e2):e173-e184.

**Abstract** 

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#### KINDLY SUPPORTED BY:







### Financial barriers to primary health care in Aotearoa New Zealand

Author: Jeffreys A et al.

**Summary:** Māori experience considerable inequity in access to primary health care, according to a study using data from the New Zealand Health Survey (2011/12 to 2018/19). Pooled data included 107,231 individuals, of whom 22,292 (21%) were Māori. Overall, 22% of Māori compared with 13% of non-Māori reported a cost barrier to seeing a GP (age- and year-adjusted odds ratio 1.71 (95% confidence interval [CI] 1.61-1.81). Furthermore, 14% of Māori compared with 5% of non-Māori reported a cost barrier to collecting a prescription (age- and year-adjusted odds ratio 2.97 (95% CI 2.75-3.20). In a fully adjusted model, age, sex, low income, and poorer underlying health were determinants of both cost barriers, and deprivation was additionally associated with the cost barrier to collecting a prescription.

**Comment:** Reduced prescription and GP costs hold such potential to address health inequities and improve outcomes for Māori, as demonstrated here. The authors note one study which found that for every \$5 a patient didn't have to pay for a prescription there was \$1200 saved in terms of hospital-bed days. They plan to look at the effect of inability to pay to see the GP too, providing further evidence for decision-makers.

Reference: Fam Pract. 2024;41(6):995-1001.

**Abstract** 

### Racism and health and wellbeing among children and youth

Author: Priest N et al.

**Summary:** A systematic review and meta-analysis has shown that racism is associated with negative physical health and biomarker outcomes relating to multiple physiological systems and biological processes in childhood and adolescence. A total of 42 studies focused on physical health or biomarker outcomes were identified from Medline, PsycINFO, PubMed, and ERIC. Minimal to moderate positive associations were found between racism and C-reactive protein, interleukin-6, body mass index (BMI), obesity, systolic blood pressure, salivary cortisol, asthma, and somatic symptoms. Marginal positive associations were found between racism and tumour necrosis factor-α, cortisol collected via saliva, urine and hair, BMI-z score, and diastolic blood pressure. The study authors noted that collective and structural changes to eliminate racism and create a healthy and equitable future for all children and youth are urgently required.

**Comment:** Important that we also consider these physiological effects of interpersonal racism within the context of institutionalised racism and intersectionality for our rangatahi.

Reference: Soc Sci Med. 2024;361:117324.

<u>Abstract</u>

# Primary care experience in people with mental health conditions

Author: Cunningham R et al.

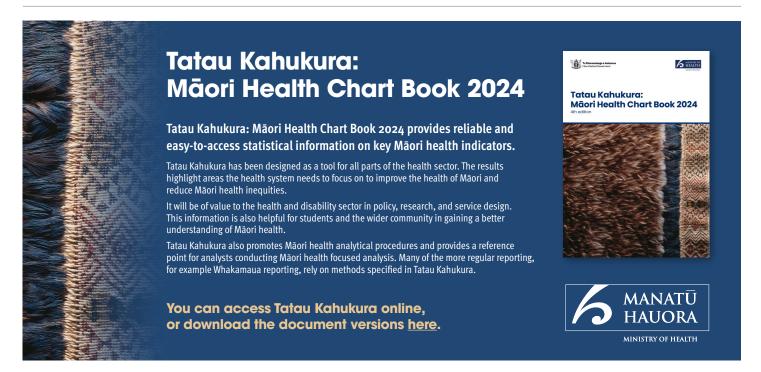
**Summary:** Individuals with self-reported mental health conditions are less likely to report a positive experience of primary healthcare, according to a national survey from the New Zealand Health Quality & Safety Commission (August 2020-May 2022). A total of 201,650 responses were analysed, with 21% reporting a current diagnosed mental health condition. There was a consistent pattern of fewer positive experiences for those with mental health conditions across dimensions of care quality, age and gender groups, and this difference was amplified among Māori. The study authors recommended that interventions to improve healthcare should focus on care for Māori, with mental health conditions as a priority.

**Comment:** Negative healthcare experiences for people with mental health conditions are associated with poor health outcomes. Systemic issues include the setup of health services and stigma which underpins these arrangements and provider care. Various solutions — including case managers, workforce training and population health programmes — have been proposed but more work is needed to build evidence in this area.

Reference: N Z Med J. 2024;137(1606):22-39. Abstract

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# Culturally responsive strategies and practical considerations for live tissue studies in Māori participant cohorts

Author: Abolins-Thompson H et al.

**Summary:** This study demonstrated how collaboration with community and the incorporation of Indigenous worldviews can be applied to molecular biology studies in a practical and culturally responsive manner, ensuring fair and equitable representation of Indigenous peoples in modern scientific data. Strategies were developed for the use of Māori participant samples for live tissue and sequencing studies, using key pillars from currently available Indigenous bioethics frameworks. Strategies were based on extensive collaborations with the local Māori community, scientific leaders, and clinical experts, as well as researchers at the Broad Institute of Massachusetts Institute of Technology and Harvard University in the US. Discussions covered issues surrounding the use of live tissue, genomic data, sending samples overseas and Indigenous data sovereignty.

**Comment:** Treatment decisions in cancer and heart disease are increasingly made based on personalised and genetic information — with incredible results. Given the high rates of these two conditions for Māori, it is important that we have safe and equitable access to these potentially life-saving treatments. This paper provides an excellent summary of the issues including how to ensure tino rangatiratanga in biomedical science research and healthcare.

Reference: Front Res Metr Anal. 2024;9:1468400.

**Abstract** 

# The perspectives of Māori and Pasifika mate kirikōpū (endometriosis) patients in Aotearoa New Zealand

Author: Ellis K et al.

**Summary:** Experiences with endometriosis have been understudied in Indigenous populations, according to a qualitative study of 27 Māori and 10 Pasifika women with the condition. The average time from symptom onset to a confirmed or suspected diagnosis of endometriosis was  $11.6 \pm 7.8$  years for Māori women and  $12.4 \pm 6.2$  years for Pasifika women. Overall, 66.7% of Māori women and 60.0% of Pasifika women felt that endometriosis treatment was not readily available to them. The authors note that poor experiences with the medical profession may dissuade Māori and Pasifika patients from seeking care, perpetuating healthcare inequities. They suggest emphasis is placed on relationship building within general practice, focusing on patient wellbeing and culturally safe care.

**Comment:** It still surprises me when I meet wahine for the first time in clinic who have experienced painful heavy periods for years, yet the idea of endometriosis was never raised with them. Sadly, this research confirms my experience, with Māori and Pacific women waiting 11-12 years for diagnosis from symptom onset. Hopefully this publication helps to raise awareness.

Reference: Societies. 2024;14(4):46.

**Abstract** 

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Research Review publications are intended for New Zealand health professionals.

### Gestational diabetes mellitus and risk factors in a multi-ethnic national case-control study

Author: Dalv BM et al.

Summary: A study of women who gave birth in New Zealand between January 2001 and December 2010 found those with gestational diabetes were more likely to be non-European, economically disadvantaged, reside in urban areas, unregistered with a lead maternity carer and more likely to smoke. The dataset included 601,166 eligible women, including 11,459 women with gestational diabetes who were randomly matched with 57,235 control women for age and year of delivery. Compared with European/other women, the adjusted odds ratios for gestational diabetes were 3.60 (95% confidence interval [CI] 3.39-3.82) for Asian women, 2.76 (95% Cl 2.57-2.96) for Pasifika women and 1.23 (95% Cl 1.15-1.31) for Māori women. Compared with control women, the odds of gestational diabetes were 1.44 (95% Cl 1.34-1.56) for the most economically disadvantaged, 1.16 (95% CI 1.04-1.30) for those not registered with a lead maternity carer and 1.20 (95% Cl 1.11-1.31) for those identified as smokers. The odds of gestational diabetes were lower for women residing in rural (0.83; 95% Cl 0.77-0.88) and remote areas (0.68; 95% Cl 0.60-0.77) compared with women living in urban areas. The study authors stated that women at risk of gestational diabetes should be identified and supported to undertake to a 75 g glucose challenge test between 24 and 28 weeks.

Reference: Endocrinol Diabetes Metab. 2024;7(6):e70005.
Abstract

# Comparative risk of type 2 diabetes development between women with gestational diabetes and women with impaired glucose tolerance over two decades

Author: Yu D et al.

**Summary:** A multiethnic prospective cohort study has shown women with gestational diabetes, especially those over 35 years, of Māori ethnicity, or with socioeconomic deprivation, have a higher risk of type 2 diabetes compared with those with impaired glucose tolerance. The study assessed type 2 diabetes incidence over 25 years using data from a primary care dataset linked with multiple health registries. Results showed that the first 5 years post-partum are a critical window for intervention. Personalised post-gestational diabetes interventions that consider age, ethnicity, and socioeconomic status are needed to reduce the incidence of type 2 diabetes, the study authors concluded.

Reference: BMJ Open Diabetes Res Care. 2024;12(6):e004210. Abstract

**Comment:** Two papers highlighting the increased risk of developing and then having long term consequences from gestational diabetes for wāhine Māori. There are also implications for pepi, who are at increased risk for metabolic-related conditions, so it is critical that we manage gestational diabetes through prevention and then screening/management before and in those critical time-periods after haputanga.



# Reducing ethnic inequities: Patterns of asthma medication use and hospital discharges in Māori in Aotearoa New Zealand

Author: Eathorne A et al.

**Summary:** Between 2019 and 2023, national dispensing of budesonide/ formoterol maintenance and/or reliever regimens markedly increased and asthma hospitalisations reduced in both Māori and non-Māori, with a greater reduction in asthma hospitalisations for Māori. Dispensing of budesonide/formoterol increased by 111% and 115% for Māori and non-Māori, respectively. Asthma hospital discharges reduced from 142.5 to 97.3 per 100,000 for Māori (absolute difference 45.2 per 100,000; 32% reduction) and from 49.4 to 37.9 per 100,000 for non-Māori (absolute difference 11.5 per 100,000; 23% reduction). The study authors noted that despite the reduction in health inequities, asthma hospitalisation rates remained two and a half times greater for Māori compared with non-Māori.

**Comment:** There have been a handful of PHARMAC decisions based on Māori-led research and/or expert opinion. One good example was funding of type 2 diabetes medicines (empagliflozin and dulaglutide) in 2021. But the combined asthma medication budesonide/formoterol was one of the first and as demonstrated here, there are sustained benefits for both Māori and non-Māori. I want to acknowledge Cheryl Davies at Kōkiri Marae for her contribution in asthma research for Māori and I was happy to see her being recognised with the Health Research Council of New Zealand <u>Te Tohu Rapuora Medal</u> at the end of 2024 – ka rawe!

Reference: Respirology. 2024. doi: 10.1111/resp.14865. Epub ahead of print.

**Abstract** 



### INDEPENDENT COMMENTARY BY

### Professor Matire Harwood Ngāpuhi

Matire (MBChB, PhD) is a hauora Māori academic and GP dividing her time as Deputy Dean of the Faculty of Medical Health Sciences at Waipapa Taumata Rau and clinical mahi at Papakura Marae Health Clinic in South Auckland.

Matire has served on a number of Boards and Advisory Committees including Waitematā DHB, Health Research Council, ACC (Health Services advisory group), COVID-19 TAG at Ministry of Health and the Māori Health Advisory Committee.

In 2017 Matire 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, in 2022 she received the College of GPs Community Service Medal and in 2024 she received The King's Service Medal for services to Māori Health.



### Demographic disparities in the incidence and case fatality of subarachnoid haemorrhage

Author: Rautalin I et al.

**Summary:** The incidence of subarachnoid haemorrhage (SAH) decreased by 34% between 2001 and 2018 in New Zealand, and SAH case-fatality decreased by 12% over the same time period. These were the findings of a study using administrative health data from the national hospital discharge and cause-of-death collections, with data from two prospective Auckland Regional Community Stroke Studies used for external validation. Compared with European/other individuals, Māori had higher SAH incidence (relative risk [RR] 2.23; 95% confidence interval [CI] 2.08-2.39) and SAH case-fatality (RR 1.14; 95% CI 1.06-1.22) over the study period. SAH incidence was also higher in Pacific peoples (RR 1.40; 95% CI 1.24-1.59) but lower in Asians (RR 0.79; 95% CI 0.71-0.89) compared with European/other individuals. The age-standardised SAH incidence ranged from 6.3 to 11.5 per 100,000 person-years and SAH case-fatality from 40% to 57% depending on geographic region.

**Comment:** Grateful that both incidence and case fatality have decreased over the past 20 years for all in Aotearoa - although a better understanding of and a plan to address the inequities for Māori are required.

Reference: Lancet Reg Health West Pac. 2024;52:101199.

# Process of development of decentralised clinical trial methodology for cancer clinical trials in Aotearoa New Zealand

Author: Lawrence NJ et al.

**Summary:** Decentralised clinical trials allow patients to remain in their local area with whānau and support networks, increasing accessibility and quality of care. A national steering committee supported by Te Aho o Te Kahu - Cancer Control Agency has adapted overseas decentralised clinical trial models to suit the needs of Aotearoa New Zealand, with an equity focus. Twelve standard operating procedures have been developed, as well as a supervision plan and a glossary, and are freely available on the New Zealand Association of Clinical Research website. The steering committee state that the methodology has potential to be used beyond oncology and support improvement in research capabilities nationally.

**Comment:** Pleased to see progress in this area as it has the potential to deliver novel and effective treatments closer to home/whānau. As the authors note, it requires the right infrastructure which hopefully can occur alongside health system reforms.

Reference: N Z Med J. 2024;137(1607):12-21.

<u>Abstract</u>

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